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AFCRC-TN-60-232(I) (GRDST-II)



A CATALOGUE OF POSITIONAL DATA OF THE RUSSIAN ARTIFICIAL EARTH SATELLITE DELTAI (Sputnik III Rocket Body)

VOLUME I OF III

(Tabulation of Individual Observations, and Air Force Sightings, 16 May to 20 May 1958)

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W. S. RIPLEY

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I JANUARY 1960



ALR RESEARCH AND DEVELOPMENT COMMAND UNITED STATES AIR FORCE

#### PROJECT SPACE TRACK

# A CATALOGUE OF POSITIONAL DATA OF THE RUSSIAN ARTIFICIAL EARTH SATELLITE DELTA I (Sputnik III Rocket Body)

Volume I of III
(Tabulation of Individual Observations, and Air Force Sightings, 16 May to 20 May 1958).

W. S. Ripley

1 January 1960

Space Flight Physics Laboratory
GEOPHYSICS RESEARCH DIRECTORATE
AIR FORCE CAMBRIDGE RESEARCH CENTER
AIR RESEARCH AND DEVELOPMENT COMMAND
UNITED STATES AIR FORCE
Bedford, Mass.

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#### ABSTRACT

This catalogue (published in three volumes) contains approximately 100,000 positional data observed during the life of the Russian earth satellite 1958 Delta I (Sputnik III Rocket Body). These data, collected by Space Track, are from two types of sources; those sent in by individuals and various organizations from all over the world and those produced by United States Air Force facilities. The positional data are arranged chronologically with observation station names and coordinates.

### A CATALOGUE OF POSITIONAL DATA OF THE RUSSIAN ARTIFICIAL EARTH SATELLITE 1958 DELTA I

#### Introduction

This publication contains approximately 100,000 optical and radar observations of the Russian artificial earth satellite 1958 Delta I (rocket carrier). The catalogue covers the lifetime of this satellite from its launching on 15 May 1958 to its decay on 3 December 1958. These data were collected by Space Track from both military and civilian sources. A small portion of the material has previously been published in a report covering the decay phase by Space Track (1) and in partial preliminary reports of the Smithsonian Astrophysical Observatory (2). By far the largest portion of the data of this catalogue were observed by the range facilities of the Patrick Air Force Base, Florida, and Edwards Air Force Base, California. The general nature of the material is the same as that published by Space Track for the satellite 1957 Beta<sup>(3)</sup>. The responsibility for the quality of the data, as in the latter report, rests with the sources --- the catalogues being essentially a compilation of data as received (except for these omitted because of obvious error in transmission). A number of satellite positions were determined at Space Track by Dr. Nannielou H. Dieter and Dr. H. Beat Wackernagel from photographic film provided by the Department of Physics, Iowa State College, Ames, Iowa, and Mr. Jasper Trier, Copenhagen, Denmark.

It should be pointed out that positive identification of the two components (carrier and nose cone) of 1958 Delta may be doubtful during the first few days after launching, and possibly on a few occasions later. Consequently, a few data listed in this catalogue may belong to 1958 Delta 2, and similarly some 1958 Delta I data may be found in a future catalogue on 1958 Delta 2.

#### Description of Catalogue

The catalogue, in three volumes, consists of a chronological listing of individual data, as well as long sequences of data for single satellite passages produced at range stations of Patrick Air Force Base and Edwards Air Force Base. These sequences are usually presented for fixed time intervals such as every second or less.

In the section of the first volume of the catalogue containing the listing of individual observations, the following information is given: the station name in abbreviated form, its geographic coordinates (longitude in degrees east of Greenwich), the station height (in meters, when known), the observation time in Greenwich Mean Time (GMT), the observed coordinates of the satellite and --- if a radar observation --- the slant range (in kilometers). The satellite coordinates are listed either in azimuth (in degrees, minutes, and seconds of arc, counted from north through east) and elevation angle, or in right ascension (in hours, minutes and seconds of time) and declination angle.

Data given in right ascension and declination are noted by an asterisk.

In the sections of the catalogue presenting the Air Force Sightings each individual data sequence is identified by date, range station, its geographic coordinates, and station height in meters above sea level. Time is in Greenwich Mean Time and the satellite coordinates are shown as azimuth and elevation angles. The Patrick Air Force data were obtained by use of the optical tracker section of the 584 Radar, and from theodolites. The Edwards Air Force data are from theodolites. In the column heads, the instrumentation type is indicated by Opt Tr or Theod, whichever the case may be.

#### REFERENCES

- (1) E. W. Wahl and W. A. Delaney, "The Orbital Motion of the Earth Satellite 1958-Delta One During the Last Days of its Existence."

  AFCRC-TN-58-662, Astia Doc. No. AD-209251, January 1959.
- (2) Smithsonian Institution Astrophysical Observatory, Cambridge, Mass.
   Special Report No. 14, July 1958
   Special Report No. 18, October 1958

Special Report No. 20, January 1959

Special Report No. 21, April 1959

(3) G. R. Miczaika, W. S. Ripley, and E. W. Wahl, "A Catalogue of Positional Data of the Russian Artificial Earth Satellite 1957 Beta." AFCRC-TN-58-640, Astia Doc. No. AD-213318, December 1958.

Air Force Sightings (16 May 1958 to 20 May 1958)

	STATION	LATITUDE		IEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	LEVATION OR DEC INATION#	SLANT RANGE IN KM
			16	6 MAY <b>19</b> 58				
-	CNAV F FLA HARRSONBG VA DECATUR B GA CCNAV F FLA CCNAV F FLA	28 27 58 N 38 28 20 N 33 47 27 N 26 27 58 N 28 27 58 N	279 24 38 281 08 00 275 42 57 279 24 38 279 24 38	463 323	01 03 00.06 01 03 33.00 01 04 30.00 01 06 30.00 01 07 00.00	102 58 48 000 00 00 014 05 00 * 028 13 48 041 49 48	40 19 48 90 00 00 18 30 00 # 42 16 48 46 38 24	
	MPALME A FLA C CNAV F FLA GRD EMMA BWT S PTREBG 1LA C CNAV F FLA	26 39 50 N N 34 N 25 27 90 N	279 5 2 279 5 261 39 06 277 16 00 279 24 38	15	01 07 21.00 01 07 30.43 01 08 00.00 01 08 00.00 01 08 30.00	090 00 00 057 46 48 103 30 00 013 14 00 * 088 21 36	44 00 00 49 02 24 44 52 12 05 18 00 * 46 46 48	
	C CNAV F FLA	28 27 58 N 28 27 58 N	279 24 38 279 24 38 279 24 38 279 24 38 279 24 38	ø	01 09 00.00 01 09 30.00 01 10 00.00 01 10 30.00 01 11 00.00	099 48 70 108 28 12 115 06 36 120 06 36 124 01 48	43 16 12 39 20 24 35 27 36 31 48 00 28 27 00	
	CAMBROG MASS S PTRSBG FLA S PTRSBG FLA S PTRSBG FLA ALBUQ A NM	42 22 47 N 27 46 40 N 27 46 40 N 27 46 40 N 35 05 03 N	288 52 14 277 16 00 277 16 00 277 16 00 253 21 24	24 15 15 15 15	01 15 00.00 01 23 18.00 01 24 52.00 01 30 49.00 02 49 33.00	090 00 00 015 05 00 * 012 57 00 * 013 00 00 * 012 36 00 *	40 00 00 40 30 00 * - 28 00 00 * - 24 00 00 * 56 48 00 *	
	ST PL B MINN ALBUQ A NM AMES A IOWA ST PL B MINN EDINBURG TEX	44 58 30 N 35 05 03 N 42 01 59 N 44 58 30 N 26 18 20 N	266 45 59 253 21 24 266 22 00 266 45 59 261 49 39	285 1520 305 285 28	02 50 06.50 02 50 12.00 02 50 36.00 02 50 43.50 02 50 47.40	009 25 10 # 013 00 00 # 009 29 00 # 010 48 30 # 334 00 00.	- 10 20 00 * 40 00 00 * - 07 00 00 * - 18 00 00 * 36 00 00	
	KIRTLND C NM S AN RAFB TX EDINBURG TEX ST PL B MINN EDINBURG TEX	34 50 53 N 29 32 06 N 26 18 20 N 44 58 30 N 26 18 20 N	253 02 56 261 42 33 261 49 39 266 45 59 261 49 39	1688 232 26 285 28	02 51 00:00 02 51 30:00 02 51 36:00 02 51 43:50 02 52 15:00	000 00 00 011 17 30 ** 335 00 00 207 12 00 335 00 00	90 00 00 31 00 00 * 49 00 00 17 45 00 63 30 00	•
	EDINBURG TEX EDINBURG TEX EDINBURG TEX ST PL 8 MINN STFD RES CAL	26 18 20 N 26 18 20 N 26 18 20 N 44 58 30 N 37 24 11 N	261 49 39 261 49 39 261 49 39 266 45 59 237 49 29	. 28 26 28 285 152	02 52 58.20 02 53 21.40 02 53 33.60 02 57 30.00 04 14 00.00	335 30 00 225 00 00 153 30 00 180 00 00 000 00 00	81 00 00 89 30 00 84 30 00 03 00 00 37 36 00	
	STFO RES CAL SAN JOSE CAL STFO RES CAL STFO RES CAL SAN JOSE CAL	37 24 11 N 37 23 01 N 37 24 11 N 37 24 11 N 37 23 01 N	237 49 29 236 11 13 237 49 29 237 49 29 238 11 13	152 122 152 152 122	04 35 35.00 04 36 04.00 04 36 05.00 04 36 25.00 04 36 47.00	266 06 00 008 42 00 * 256 06 00 241 54 00 009 38 00 *	44 00 00 45 06 00	
	STFD RES CAL STFD RES CAL STFD RES CAL WLNTCK A CAL STFD RES CAL	37 24 11 N 37 24 11 N 37 24 11 N 37 55 30 N 37 24 11 N	237 49 29 237 49 29 237 49 29 237 55 30 237 49 29	152 152 152 10 152	04 37 00.00 04 37 20.00 04 37 40.00 04 38 00.00 04 38 00.00	230 24 00 221 24 00 214 24 00 010 36 30 1 207 48 00	44 12 00 42 48 00 41 00 00 41 06 00 38 42 00	•
	LOSALTOS CAL STFD RES CAL STFD RES CAL STFD RES CAL STFD RES CAL	37 23 56 N 37 24 11 N 37 24 11 N 37 24 11 N 37 24 11 N	237 52 34 237 49 29 237 49 29 237 49 29 237 49 29	29 152 152 152 152	04 38 16.00 04 38 20.00 04 38 40.00 04 39 00.00 04 39 15.00	010 50 00 6 202 36 00 198 12 00 194 24 00 191 54 00	- 15 00 00 36 30 00 34 00 00 31 48 00 30 06 00	•
	STFD RES CAL STFD RES CAL STFD RES CAL SNFRISCO CAL STFD RES CAL	37 24 11 N 37 24 11 N 37 24 11 N 37 46 10 N 37 24 11 N	237 49 29 237 49 29 237 49 29 237 32 07 237 49 29	152 152 152 76 152	04 40 00.00 04 40 15.00 04 40 30.00 04 40 40.00 04 40 45.00	186 00 00 184 36 00 183 48 00 012 06 00 181 54 00	25 24 00 24 12 00 22 24 00 * - 22 00 00 21 30 00	•
	STFO RES CAL STFD RES CAL STFO RES CAL STFO RES CAL STFO RES CAL	37 24 11 N 37 24 11 N 37 24 11 N 37 24 11 N 37 24 11 N	237 49 29	152 152 152 152 152	04 41 00 00 04 41 15 00 04 41 30 00 04 41 45 00 04 42 00 00	177 54 00	20 12 00 19 06 00 18 00 00 17 00 00 15 54 00	
	STFD RES CAL STFD RES CAL STFD RES CAL CHIN LAK CAL STFD RES CAL	37 24 11 N 37 24 11 N 37 24 11 N 35 39 25 N 37 24 11 N	237 49 29 237 49 29 242 20 13	152 152 152 701 152	04 42 15.00 04 42 30.00 04 42 45.00 04 42 46.00 04 43 00.00	175 42 00 013 00 00 011 38 00	14 12 00 14 00 00 13 00 00 * - 34 30 00 12 06 00	•
	WHTIER A CAL STFO RES CAL MAUI HAWAII MAUI HAWAII MAUI HAWAII		237 49 29 203 44 23 203 44 23	149 152 3048 3048 3048	04 43 12.00 04 46 30.00 06 27 25.33 06 27 25.38 06 27 44.33	359 06 00 014 27 24 014 27 30	37 36 00 * 05 38 00 * 05 48 00	*

STATION	LATITUDE	LONGITUOE EAST	HEIGHT IN HETERS	TIME GMT IN HR HIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			16 HAY 1958	(CONT)			
MAUI HAWAII MIYAZAKI J MIYAZAKI J MIL RAO MASS MIL RAO MASS	20 42 36 N 31 55 23 N 31 55 23 N 42 37 03 N 42 37 03 N	203 44 23 131 25 24 131 25 24 288 30 28 288 30 28	3048 8 8 155 155	06 28 03.88 11 41 17.00 11 42 58.00 14 45 28.00 14 46 02.80	014 31 00 # 010 06 00 # 011 25 00 # 156 36 00 143 00 00	- 02 59 00 * 11 00 00 * - 14 00 00 * 08 30 00 11 00 00	1122 956
MIL RAO MASS HIL RAO MASS MIL RAD HASS MIL RAD MASS MIL RAO MASS	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N	288 30 28 288 30 28 288 30 28 288 30 28 288 30 28	155 155 155 155 155	14 46 25.50 14 46 58.90 14 47 30.00 14 48 03.00 14 48 29.50	133 18 00 115 00 00 098 06 00 083 06 00 074 00 00	12 24 00 13 00 00 11 42 00 09 24 00 06 54 00	898 849 880 986 1116
MIL RAD MASS MIL RAD MASS MIL RAD HASS MIL RAD MASS TUCSON ARIZ	→2 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 32 13 59 N	288 30 28 288 30 28 288 30 28 288 30 28 249 03 51	155 155 155 155 227	14 48 38.00 14 49 01.10 14 49 31.80 14 49 58.40 15 36 24.00	070 54 00 065 48 00 059 12 00 055 00 00 171 00 00	06 24 00 04 30 00 02 12 00 00 05 00 28 00 00	1282 1473 1653
MIL RAO MASS MIL RAO MASS MIL RAD HASS MIL RAD MASS MIL RAD MASS	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N	288 30 28 288 30 28 288 30 28 288 30 28 288 30 28	155 155 155 155 155	16 35 16.00 16 35 25.00 16 35 27.10 16 35 55.00 23 52 13.20	311 48 00 314 00 00 315 18 00 327 42 00 329 00 00	07 42 00 07 36 00 07 30 00 06 54 00 04 43 00	1047 1054 1046 1073 2112
			17 HAY 1958	3			
WASH BEHL OC BRYN ATHN PA WASH BEHL OC BRISTOL TENN LANSG A MICH	38 49 13 N 40 08 00 N 38 49 13 N 36 35 03 N 42 44 00 N	282 59 31 284 56 00 282 59 31 '77 50 31 275 31 00	85 527 261	01 43 18.00 01 44 10.00 01 44 10.00 01 44 57.00 01 45 00.00	007 18 00 # 270 00 00 007 55 00 # 007 48 00 # 270 00 00	16 48 00 # 20 00 00 09 48 00 # 25 00 00 # 40 00 00	
N CANTON 8 O MIL RAO HASS WASH BEHL OC MIL RAO HASS MIL RAO MASS	41 04 50 N 42 37 03 N 38 49 13 N 42 37 03 N 42 37 03 N	278 26 02 288 30 28 282 59 3_ 288 30 28 288 30 28	155 155 1 <b>5</b> 5	01 45 53.00 01 46 03.00 01 46 30.00 01 47 06.00 01 47 21.00	009 32 00 * 242 30 00 009 22 00 * 229 24 00 228 24 00	- 05 40 00 * 14 42 00 - 09 06 00 * 14 42 00 13 54 00	2170 2297 2346
MIL RAO HASS WASHGTN A OC HIL RAD HASS WPALH8 A FLA EGLN AF8 FLA	42 37 03 N 38 45 30 N 42 37 03 N 26 39 30 N 30 33 00 N	288 30 28 282 47 30 288 30 28 279 55 20 273 22 41	155 69 155 5	01 47 41.00 01 47 42.00 01 48 00.00 01 48 16.00 01 48 30.00	225 54 00 222 00 00 223 00 00 270 00 00 165 54 00	13 30 00 27 00 00 12 30 00 57 00 00 58 02 24	2425 2477
EGLN AF8 FLA EGLN AF8 FLA EGLN AF8 FLA EGLN AF8 FLA EGLN AF8 FLA	30 33 00 N 30 33 00 N 30 33 00 N 30 33 00 N 30 33 00 N	273 22 41 273 22 41 273 22 41 273 22 41 273 22 41		01 48 35.00 01 48 40.00 01 48 45.00 01 48 50.00 01 48 54.00	165 31 48 164 26 24 164 35 00 162 55 12 162 09 36	56 49 12 55 37 48 54 10 48 53 03 36 52 22 12	
MIL RAO MASS BRISTOL TENN MIL RAO MASS HIL RAO HASS WASH BEHL OC	42 37 03 N 36 35 03 N 42 37 03 N 42 37 03 N 38 49 13 N	288 30 28 277 50 31 288 30 28 288 30 28 282 59 31	155 527 155 155	01 50 26.00 01 50 55.00 01 50 56.00 01 51 12.00 01 51 20.00	206 00 00 178 30 00 202 54 00 201 36 00 011 52 00 *	08 24 C0 17 30 00 06 06 00 05 42 00 - 33 00 00 #	3099 3249 3339
ALBUO-GS NM WHTIER A CAL CHIN LAK CAL CHIN LAK CAL WHTIER A CAL	35 06 22 N 33 58 40 N 35 39 25 N 35 39 25 N 33 58 40 N	253 23 14 241 58 25 242 20 13 242 20 13 241 58 25	1565 149 701 701 149	03 30 00.00 03 30 35.00 03 30 49.50 03 30 55.90 03 31 22.00	005 55 00 # 011 19 00 # 359 00 00 000 00 00 012 06 00 #	36 48 00 # 55 00 00 # 84 00 00 87 00 00 39 36 00 #	
WHTIER A CAL L ALAMOS NH L ALAMOS NH WHTIER A CAL L CRUC 8 NM	33 58 40 N 35 52 30 N 35 52 30 N 33 58 40 N 32 19 16 N	241 58 25 253 40 40 253 40 40 241 58 25 253 12 15	149 2256 2256 149 1180	03 31 36.00 03 32 10.00 03 32 27.00 03 32 58.00 03 35 00.00	012 08 00 # 008 56 00 # 009 11 00 # 012 52 00 # 010 47 00 #	06 00 00 * 02 12 00 * 03 36 00 *	
WHTIER A CAL TUCSON ARIZ EOW AF O CAL EOW AF D CAL EOW AF D CAL	33 58 40 N 32 13 59 N 34 56 43 N 34 56 43 N 34 56 43 N	241 58 25 249 03 51 242 04 58 242 04 58 242 04 58	149 22 <b>7</b> 785 785 785	03 35 18 00 03 36 24 00 04 28 08 00 04 29 00 00 04 30 00 00	013 22 00 * 171 00 00 334 44 34 336 25 37 341 01 44	- 22 00 00 * 28 00 00 23 22 40 35 11 42 55 54 18	
EOW AF O CAL EOW AF O CAL EOW AF O CAL EOW AF O CAL	34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	242 04 58 242 04 58 242 04 58 242 04 58 242 04 58	785 785 785 785 785	04 31 00.00 04 31 12.00 04 31 18.00 04 32 00.00 04 33 00.00	018 51 00 064 27 61 089 51 46 137 19 48 145 20 24	81 43 48 83 59 34 83 60 00 67 19 48 48 09 00	
MAUI HAWAII MAUI HAWAII HIROSHIMA J	20 42 36 N 20 42 36 N 34 22 08 N	203 44 23 203 44 23 132 28 10	3048 3048 3	07 10 37.36 07 11 00.26 10 32 24.00	011 27 54 4 011 37 54 4 011 00 00 4	- 29 42 00 4	

STATION	LATITUDE	LONGI TUDE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR PST ASCEN #	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
3121100	ENTITODE	CAST			1 11 Macek	DECLINATION-	
			17 MAY 1958	(CONT)			
MITAKA J SENDAI J TOYOHASHI J TOKUSHIMA J SUWA J	35 40 20 N 38 15 22 N 34 45 09 N 34 07 34 N 36 00 13 N	139 32 30 140 51 56 137 24 37 134 35 32 138 07 43	50 45 16 1 762	10 32 35.20 10 32 43.00 10 33 25.00 10 33 2T.00 10 33 29.00	311 20 00 284 54 00 009 30 00 # 000 00 00 008 14 00.#	29 30 00 24 54 00 53 00 00 * 65 00 00 44 00 00 *	
MITAKA J SUWA J KANYAMACHI J MUSASHINO J TAKADA J	35 40 20 N 36 00 13 N 34 03 46 N 35 42 58 N 37 06 38 N	139 32 30 138 07 43 135 15 10 139 34 35 138 15 22	50 762 40 75 23	10 33 30.40 10 33 41.00 10 33 55.00 10 34 01.00 10 34 04.00	294 18 00 009 38 00 # 011 00 00 # 2TO 00 00 010 14 00 #	56 36 00 40 00 00 * 57 00 00 * 66 00 00 24 00 00 *	
NAGOYA J MITAKA J YOKKAICHI J HASHIMOTO J KASUKABE J	35 08 57 N 35 40 20 N 35 00 15 N 34 19 02 N 35 58 36 N	136 59 11 139 32 30 136 39 00 135 3T 03 139 44 34	50 50 3 125 5	10 34 14.00 10 34 14.80 10 34 23.00 10 34 25.00 10 34 28.00	270 00 00 257 30 00 011 10 00 # 011 05 00 # 195 30 00	83 30 00 67 30 00 32 00 00 # 41 00 00 # 40 00 00	
MIZUKAIDO J NAGOYA J MANAZURU 1 J KURMEMACHI J MUSASHINO J	36 00 56 N 35 08 5T N 35 09 23 N 35 45 18 N 35 42 58 N	139 59 18 136 59 11 139 08 46 139 31 48 139 34 35	12 50 25 52 75	10 34 31.00 10 34 33.00 10 34 35.00 10 34 40.00 10 34 42.00	010 10 00 # 180 00 00 010 21 00 # 225 00 00 225 00 00	21 00 00 # 80 30 00 26 00 00 # 6T 30 00 67 00 00	
MITAKA J TOYOHASHI J CHUNICHI J HONJO J KAGOSHIMA J	35 40 20 N 34 45 09 N 35 10 23 N 36 14 25 N 31 31 34 N	139 32 30 13T 24 37 136 54 14 139 11 05 130 31 4T	50 16 25 56 13	10 34 51.80 10 35 03.00 10 35 04.00 10 35 20.00 10 35 35.00	215 12 00 011 25 00 * 011 43 00 * 010 05 00 * 014 18 00 *	65 54 00 17 00 00 # 15 00 00 # 14 00 00 # 20 00 00 #	
MITAKA J - KIRYU J MIZUKAIDO J NIIGATA J KANYAMACHI J	35 40 20 N 36 24 22 N 36 00 56 N 3T 55 05 N 34 03 46 N	139 32 30 139 19 54 139 59 18 139 02 21 135 15 10	50 110 12 24 40	10 35 42.60 10 36 01.00 10 36 14.00 10 36 25.00 10 36 34.00	186 00 00 180 00 00 180 00 00 180 00 00 013 04 00 *	53 36 00 49 00 00 45 00 00 34 00 00 - 07 00 00 **	
HIROSHIMA J SUWA J KASUKABE J MITAKA J IKOMA J	34 22 08 N 36 00 13 N 35 58 36 N 35 40 20 N 34 40 34 N	132 28 17 138 07 43 139 44 34 139 32 30 135 40 23	3 762 5 50 634	10 36 41.00 10 36 48.00 10 36 50.00 10 36 53.70 10 36 54.00	013 29 00 * 012 19 00 * 195 30 00 172 12 00 013 00 00 *	- 08 00 00 ** - 15 00 00 ** - 64 00 00 - 38 12 00 - 10 00 00 **	
TAOOTSU J HASHIMOTO J HGSHMTSYMA J MITAKA J SUWA J	34 16 20 N 34 19 02 N 36 02 22 N 35 40 20 N 36 00 13 N	133 45 16 135 37 03 139 23 54 139 32 30 138 07 43	5 125 31 50 T62	10 36 55.00 10 37 08.00 10 37 21.00 10 37 25.80 10 38 18.00	013 25 00 * 013 03 00 * 012 17 00 * 169 18 00 012 42 00 *	- 11 00 00 # - 12 00 00 # - 22 00 00 # 33 06 00 - 26 00 00 #	ę
MIZUKAIOO J KURMEMACHI J OTSU J OTSU J YAMAGATA J	36 00 56 N 35 45 18 N 35 00 24 N 35 00 24 N 38 15 16 H	139 59 18 139 31 48 135 52 08 135 52 08 140 20 59	12 52 90 90 151	10 38 31.00 10 38 34.00 10 38 37.00 10 38 39.00 10 38 43.00	225 00 00 225 00 00 158 00 00 160 00 00 273 00 00	64 00 00 62 00 00 22 00 00 21 00 00 44 30 00	•
KONKO J ASAHIKAWA J FUCHU J MIZUKAIOO J KURMEMACHI J	34 32 31 N 43 46 27 N 34 34 17 N 36 00 56 N 35 45 18 N	133 37 40 142 21 50 133 14 19 139 59 18 139 31 48	113 30 12 52	10 39 0T.00 10 39 24.00 10 39 42.00 10 40 22.00 10 40 31.00	011 12 00 4 265 48 00 045 00 00 225 00 00 225 00 00	55 00 00 0 44 54 00 77 30 00 60 00 00 60 00 00	
MIYAZAKI J HGSHMTSYMA J MIYAZAKI J TUCSON ARIZ EOW AF O CAL	31 55 23 N 36 02 22 N 31 55 23 N 32 13 59 N 34 56 43 N	131 25 24 139 23 54 131 25 24 249 03 51 242 04 58	31 8 227	12 22 50.00 12 22 51.00 12 24 56.00 16 17 31.00 17 04 34.00	008 23 00 4 009 2T 00 4 208 00 00	- 09 00 00	*
EDW AF D CAL EOW AF D CAL EOW AF D CAL EOW AF D CAL EDW AF D CAL	34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	242 04 58 242 04 58 242 04 58 242 04 58 242 04 58	785 T85 T85	17 04 38.00 17 35 00.00 17 36 00.00 1T 39 00.00 1T 3T 00.00	149 03 04 149 80 18 151 09 28	11 34 48 26 55 26 20 3T 16 08 36 21 15 40 12	•
L AMYSTMHESH L AMYSTMHESH L AMYSTMHESH L AMYSTMHESH L AMYSTMHESH	36 02 22 N 36 02 22 N 36 02 22 N 36 02 22 M 36 02 22 N	139 23 54 139 23 54 139 23 54 139 23 54	31 31 31	19 34 31.00 19 36 34.00 19 37 21.70 19 3T 51.00 21 22 51.00	011 54 00 012 17 00 012 23 00	+ - 13 00 00 + - 22 00 00 + - 24 18 00	*

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			L6 MAY 1958	•			
C CNAV G FLA C CNAV G FLA ALBUQ A NM MANHATTN KAN MANHATTN KAN	28 16 17 N 28 16 17 N 35 05 03 N 39 09 45 N 39 09 45 N	279 23 37 279 23 37 253 21 24 263 31 09 263 31 09	11 11 1520 311 311	00 48 00.00 01 24 00.00 02 25 22.00 02 25 34.00 02 25 44.00	137 46 12 203 28 48 012 11 45 * 008 49 30 * 009 02 30 *	12 53 24 46 40 12 43 54 00 # 08 03 00 # 05 35 00 #	
ST LOUIS MO OAYTON 8 O S AN RAFB TX S AN RAFB TX 8TLSVL 8 CKL	38 37 59 N 39 50 14 N 29 32 06 N 29 32 06 N 36 44 48 N	269 48 09 275 44 03 261 42 33 261 42 33 264 04 12	152 249 232 232	02 26 50.00 02 27 20.00 02 28 39.40 02 30 31.50 03 28 55.00	008 33 24 * 008 05 00 * 010 43 00 * 012 19 00 * 012 15 00 *	03 24 00 # - 03 00 00 # 12 48 00 # - 18 06 00 # - 00 30 00 #	
WLNTCK A CAL L CRUC B NM ALBUO A NM OAKLANO CAL LOSALTOS CAL	37 55 30 N 32 19 16 N 35 05 03 N 37 47 00 N 37 23 56 N	237 55 30 253 12 15 253 21 24 237 48 00 237 52 34	10 1180 1520 30 29	04 11 47.50 04 12 25.00 04 12 35.00 04 13 14.00 04 13 19.00	009 03 00 # 007 23 00 # 007 39 06 # 010 12 00 # 010 08 00 #	06 00 00 # 09 30 00 # 03 40 00 # = 11 20 00 # = 12 00 00 #	ē: .
SAN JOSE CAL L CRUC 8 NM CHIN LAK CAL WLNTCK A CAL SAN JOSE CAL	37 23 01 N 32 19 16 N 35 39 25 N 37 55 30 N 37 23 01 N	238 11 13 253 12 15 242 20 13 237 55 30 238 11 13	122 1180 701 10 122	04 13 22.00 04 13 25.00 04 13 40.40 04 13 48.00 04 14 04.00	010 08 00 # 007 46 00 # 009 25 00 # 010 06 00 # 011 10 00 #	- 11 50 00 # 03 30 00 # - 09 00 00 # - 12 00 00 # - 21 08 00 #	
L CRUC B NM WLNTCK A CAL L CRUC 8 NM WLNTCK A CAL L CRUC B NM	32 19 16 N 37 55 30 N 32 19 16 N 37 55 30 N 32 19 16 N	253 12 15 237 55 30 253 12 15 237 55 30 253 12 15	1180 10 1180 10 1180	04 14 16.00 04 14 45.00 04 15 27.00 04 16 00.00 04 16 35.00	008 13 00 * 011 00 24 * 008 43 00 * 011 31 00 * 009 12 00 *	- 03 00 00 * - 25 18 00 * - 12 00 00 * - 32 21 00 * - 21 00 00 *	
TUCSON ARIZ CHIN LAK CAL EOINBURG TEX HONJO J HONJO J	32 13 59 N 35 39 25 N 26 18 20 N 36 14 25 N 36 14 25 N	249 03 51 242 20 13 261 49 39 139 11 05 139 11 05	227 701 28 56 56	04 17 31.00 04 18 14.20 10 26 17.20 10 56 03.00 11 05 25.00	208 00 00 011 30 00 * 180 00 00 257 00 00 357 00 00	15 30 00 - 40 12 00 * 65 00 00 27 42 00 30 30 00	
SENOAL J MUSASHINO J MITAKA J KIRYU J KIRYU J NIIGATA J	38 15 22 N 35 42 58 N 35 40 20 N 36 24 22 N 37 55 05 N	140 51 56 139 34 35 139 32 30 139 19 54 139 02 21	45 75 50 110 24	11 14 15.00 11 14 20.90 11 14 23.30 11 14 44.00 11 15 18.00	262 00 00 270 00 00 270 54 00 260 00 00 245 00 00	19 12 00 20 42 00 20 54 00 24 00 00 22 00 00	
MITAKA J SENOAI J * HGSHMTSYMA J TAKAOA J SENOAI J	35 40 20 N 38 15 22 N 36 02 22 N 37 06 38 N 38 15 22 N	139 32 30 140 51 56 139 23 54 138 15 22 140 51 56	50 45 31 23 45	11 15 24.00 11 15 50.00 11 15 55.00 11 16 02.00 11 16 24.00	255 24 00 241 54 00 008 29 00 * 008 29 00 * 234 00 00		
KANAZAWA J MITAKA J SAPPORO J SAPPORO J SHIRAZ IRAN	36 32 45 N 35 40 20 N 43 04 49 N 43 04 49 N 29 38 40 N	136 41 01 139 32 30 141 22 13 141 22 13 052 31 33	80 50 20 20 1600	11 16 32.00 11 16 55.80 11 17 03.00 11 17 19.00 16 32 11.00	009 12 00 ** 233 12 00 009 31 00 ** 009 43 00 ** 007 55 00 **	23 54 00 = 23 00 00 4 = 26 00 00 4	<u>;</u>
SHIRAZ IRAN SHIRAZ IRAN HGSHMTSYMA J	29 38 40 N 29 38 40 N 36 02 22 N	052 31 33 052 31 33 139 23 54	1600 1600 31	16 34 15.00 16 38 00.00 20 15 55.00	010 04 00 * 011 40 00 * 008 29 42 *	- 30 12 00 4	+
	·		19 MAY 1	958			
MANHATTN KAN WPALMB A FLA L CRUC B NM L CRUC B NM ALBUQ A NM	39 09 45 N 26 39 30 N 32 19 16 N 32 19 16 N 35 05 03 N	263 31 09 279 55 20 253 12 15 253 12 15 253 21 24	311 5 1180 1180 1520	01 09 24.00 01 22 24.00 03 01 15.00 03 01 42.00 03 05 33.00	270 00 00 009 30 00 4 011 53 00 4	53 00 00 53 00 00 6 43 00 00	•
L CRUC 8 NM TUCSON ARIZ SACMTO PK NM ORGN P SS NM TUCSON ARIZ	32 19 16 N 32 13 59 N 32 47 14 N 32 25 24 N 32 13 59 N	253 12 15 249 03 51 254 10 47 253 26 51 249 03 51	1180 227 2823 1651 227	03 05 41.00 03 06 14.00 03 06 28.80 03 06 53.00 03 07 13.00	270 00 00 008 27 00 008 46 00	59 36 00 * 14 30 00	
ORGN P SS NM ORGN P SS NM ORGN P SS NM L CRUC B NM L CRUC B NM	32 25 24 N 32 25 24 N 32 25 24 N 32 19 16 N 32 19 16 N	253 12 15	1651 1651 1651 1180 1180	03 07 21.18 03 07 29.19 03 07 37.20 03 08 39.00 03 09 04.00	009 09 42 009 16 06 010 07 00	* 03 19 00 * 01 27 00 * - 12 00 00	* *
L CRUC B NM OENVR A COLO L CRUC B NM L CRUC B NM ALBUQ A NM	32 19 16 N 39 44 52 N 32 19 16 N 32 19 16 N 35 05 03 N	255 03 24 253 12 15 253 12 15	1180 1625 1180 1180 1520	03 69 49.00 03 11 01.20 03 11 39.00 03 14 32.00 03 42 30.00	192 30 00 011 36 00 012 25 00	13 00 00 + - 36 00 00 + - 47 00 00	*

	STATION	LATITUDE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
	37	2	2/101	19 MAY 195		,		,
0 0	ILNTCK A CAL OSALTOS CAL ORGN P SS NM ORGN P SS NM	37 55 30 N 37 23 56 N 32 25 24 N 32 25 24 N 32 25 24 N	237 55 30 237 52 34 253 26 51 253 26 51 253 26 51	10 29 1651 1651 1651	04 53 44.00 04 53 50.00 11 10 14.24 11 10 18.24 11 10 26.24	008 41 00 * 008 42 00 * 020 01 12 * 020 10 48 * 020 32 12 *	- 15 00 00 # - 14 00 00 # - 22 10 00 # - 21 39 00 % - 20 30 00 #	
				20 MAY 195	8			
S E	ST LOUIS MO S ANT A TEX EOINBURG TEX EOINBURG TEX S ANT A TEX	38 37 59 N 29 27 48 N 26 18 20 N 26 18 20 N 29 27 48 N	269 48 09 261 30 56 261 49 39 261 49 39 261 30 56	152 256 28 28 256	01 57 50.00 02 00 30.00 02 01 41.30 02 01 44.80 02 02 10.00	007 16 00 * 010 10 34 * 225 00 00 225 00 00 011 38 00 *	14 24 00 # 28 30 17 # 82 30 00 81 00 00 - 04 48 00 #	
1	MANHATTN KAN ALBUO B NM L ANGLS CAL CHIN LAK CAL L ANGLS CAL	39 09 45 N 35 06 37 N 33 59 41 N 35 39 25 N 33 59 41 N	263 31 09 253 27 47 241 45 43 242 20 13 241 45 43	311 1667 61 701 61	02 12 25.00 03 45 03.00 03 45 15.00 03 45 41.40 03 46 05.00	007 32 00 * 007 08 30 * 008 40 00 * 007 56 00 * 009 20 00 *	03 50 00 # 05 42 00 # 04 00 00 # 03 06 00 # 00 00 00 #	
	L CRUC B NM L ANGLS CAL L CRUC B NM CHIN LAK CAL MAUI HAWAII	32 19 16 N 33 59 41 N 32 19 16 N 35 39 25 N 20 42 36 N	253 12 15 241 45 43 253 12 15 242 20 13 203 44 23	1180 61 1180 701 3048	03 46 59.00 03 47 47.00 03 48 41.00 03 53 44.80 05 34 29.41	007 34 00 # 009 35 00 # 008 36 00 # 180 00 00 013 28 06 #	05 00 00 # - 04 00 00 # - 16 00 00 # 05 00 00 19 36 00 #	
	MAUI HAWAII MAUI HAWAII MIZUKAIOO J YOKKAICHI J MIE J	20 42 36 N 20 42 36 N 36 00 56 N 35 00 15 N 34 58 10 N	203 44 23 203 44 23 139 59 18 136 39 00 136 37 19	3048 3048 12- 3	05 50 16.30 07 22 05.50 10 46 08.00 10 48 51.00 10 49 24.00	012 15 24 # 008 15 12 # 006 33 00 # 009 23 00 # 225 00 00	21 04 00 # = 06 31 00 # 14 00 00 # = 08 00 00 # 28 00 00	= =
	YOKKAICHI J MIZUKAIOO J MANAZURU 1 J SUWA J ICHINOMIYA J	35 00 15 N 36 00 56 N 35 09 23 N 36 00 13 N 35 17 32 N	136 39 00 139 59 18 139 08 46 138 07 43 136 48 42	3 12 25 762 8	10 49 38 • 00 10 50 02 • 00 10 50 35 • 00 10 50 39 • 00 10 52 49 • 00	009 13 00 # 225 00 00 009 24 00 # 009 37 00 # 010 20 00 #	- 13 00 00 # 21 00 00 - 20 00 00 # - 24 00 00 # - 47 00 00 #	
	SHIRAZ IRAN SHIRAZ IRAN SHIRAZ IRAN ADLAIO C AUS AOLAIO A AUS	29 38 40 N 29 38 40 N 29 38 40 N 34 44 00 S 34 55 14 S	052 31 33 052 31 33 052 31 33 138 40 00 138 36 14	16 00 16 00 16 00	16 05 44.50 16 05 52.40 16 06 08.30 18 45 23.00 20 32 18.50	008 50 15 # 008 57 06 # 009 11 24 # 002 54 00 # 133 00 00	16 37 48 # 14 33 00 # 10 15 21 # = 30 30 00 # 36 00 00	<del>)</del> •
				21 MAY 1	958			
	UNION JOHS8G AOLAIO C AUS AOLAIO A AUS AOLAID C AUS AOLAID A AUS	26 10 55 S 34 44 CO S 34 55 14 S 34 44 OO S 34 55 14 S	028 04 30 138 40 00 138 36 14 138 40 00 138 36 14	1806 55 55	03 38 23.00 19 24 26.00 19 24 34.00 19 24 36.00 19 24 39.50	003 08 00 # 154 30 00 154 30 00 156 30 00 156 30 00	- 24 00 00 4 18 00 00 18 30 00 18 00 00 17 00 00	•
				22 MAY 1	958			
	MIL RAO MASS CURAÇÃO NWI	42 37 03 N 12 09 04 N			13 22 02•20 19 19 24•00	162 18 00 270 00 00	05 48 00 27 00 00	1203
	PRET B S AF UNION JOHSBG KASHIWABRA J KASHIWABRA J UNION JOHSBG	25 43 43 S 26 10 55 S 34 30 24 N 34 30 24 N 26 10 55 S	028 04 30 1 135 48 15 1 135 48 15	1806 66 66	03 05 42.00 03 05 46.00 10 58 33.00 10 59 33.00 18 11 14.80	003 18 00 # 003 10 00 # 008 30 00 # 009 42 00 # 010 52 30 #		*
	UNION JOHSBG UNION JOHSBG PRET B S AF UNION JOHSBG UNION JOHSBG		028 04 30 028 12 42 028 04 30	1806 2 1311 1806	18 12 35.00 18 13 51.00 18 14 09.00 18 14 28.00 18 14 42.60	011 35 00 # 011 44 00 #	15 00 00 11 24 00 08 36 00	* *
	UNION JOHSBG WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 : 31 06 07 : 31 06 07 :	S 136 47 0° S 136 47 0° S 136 47 0°	7 162 7 162 7 162	18 15 03.00 20 40 15.05 20 40 31.38 20 40 34.70 20 40 49.00	162 38 45 157 10 15 155 56 31	03 30 00 · 45.03 10 47 54 14 48 20 42 50 00 25	•
	WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 31 06 07	S 136 47 0 S 136 47 0	7 162 7 162	20 41 04.20 20 41 20.54 20 41 35.10 20 42 08.84	134 51 18 126 53 56	51 29 38 52 35 24 53 01 04 51 41 24	

STATION	LATITUDE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION#	SLANT RANGE IN KM
		;	23 MAY 1958	(CONT)			
WOOMER AUS	31 06 07 S	136 47 07	162	20 42 23.93	099 50 38	50 08 45	
WOOMER AUS	31 06 07 S 31 06 07 S	136 47 07 136 47 07	162 162	20 42 39 • 77 20 42 56 • 45	092 25 48 085 22 51	47 56 24 45 12 39	
WOOMER AUS	31 06 07 S 31 06 07 S	136 47 07 136 47 07	162 162	20 43 11.46 20 43 34.42	079 53 38 072 57 36	42 32 42 38 11 52	
WOOMER AUS					067 17 24		
WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07	162 162 162	20 43 58.17 20 44 12.57 20 44 22.32	064 18 36 062 23 24	33 45 00 31 07 30 29 18 25	
	•		24 MAY 1958				
UNION JOHSBG UNION JOHSBG PRET B S AF LAPLAT O ARG LAPLAT O ARG	26 10 55 S 26 10 55 S 25 43 43 S 34 54 31 S 34 54 31 S	028 04 30 028 04 30 028 12 42 302 04 03 302 04 03	1806 1806 1311	03 42 32.50 03 43 47.20 03 47 01.00 08 57 19.40 08 57 51.30	002 38 00 * 002 13 00 * 002 10 00 * 001 49 13 * 001 45 24 *	- 68 30 00 # - 51 48 00 # - 02 42 00 # - 54 29 06 # - 48 18 54 #	*
LAPLAT O ARG	34 54 31 5	302 04 03		09 02 05.90	001 46 00 #	03 30 00 #	
UNION JOHSBG UNION JOHSBG KONKO J SYONEY AUS	26 10 55 S 26 10 55 S 34 32 31 N 33 54 43 S	028 04 30 028 04 30 133 37 40 151 05 41	1806 18 <b>06</b> 4 15	17 04 11.00 17 04 41.00 18 30 36.00 19 31 47.50	013 36 00 # 013 35 00 # 019 25 00 # 022 45 00 #	18 12 00 # 16 00 00 # 02 00 00 # - 53 00 00 #	
WOOMER AUS	31 06 07 S	136 47 07	162	19 33 23.58	096 51 54	14 17 42	
WOOMER AUS	31 06 07 S 31 06 07 S	136 47 07 136 47 07	162 162	19 33 32.70 19 33 46.35	095 24 21 093 23 06	13 41 31 12 48 18	
WOOMER AUS PERTH AUS	31 06 07 S 32 00 07 S	136 47 07 115 51 10	162	19 34 03.52 21 17 43.00	090 55 15 106 48 00	11 40 12 29 38 00	
PERTITION AND	32 <b>00</b> 01 0			21 11 43000	100 40 02	27 30 00	
			25 MAY 195	8			
LAPLAT O ARG	34 54 31 5	302 04 03		07 47 06.20	002 21 28 #		
LAPLAT O ARG	34 54 31 S 34 54 31 S	302 04 03 302 04 03		07 50 09.30 09 31 21.50	001 56 59 <b>*</b> 015 26 00 <b>*</b>	- 67 19 30 *	•
LAPLAT O ARG LAPLAT O ARG	34 54 31 S 34 54 31 S	302 04 03 302 04 03		09 32 02.80 09 33 37.60	016 00 02 <b>*</b> 019 32 53 <b>*</b>		
LAPLAT O ARG	34 54 31 5	302 04 03		09 34 08.10	020 31 47 #		
LAPLAT O ARG Laplat o arg	34 54 31 S 34 54 31 S	302 04 03 302 04 03		09 35 52.80 09 37 35.10	022 <b>3</b> 5 46 <b>4</b> 023 30 08 <b>4</b>	06 53 00 4	
DASHOL NOINU DASHOL NOINU	26 10 55 S 26 10 55 S	028 04 30 028 04 30	1806 18 <b>06</b>	17 40 36.70 17 41 26.00	011 22 30 # 011 46 00 #		
UNION JOHSBG	26 10 55 5	028 04 30	1806	17 42 25.20	012 01 12 *	- 03 18 00 4	
OLFSFTN S AF UNION JOHSBG	25 57 33 S 26 10 55 S	028 14 53 028 04 30	1544 1806	17 43 19.94 17 43 33.00	012 14 00 4 012 26 00 4	- 14 00 00 4	*
OLFSFTN S AF UNION JOHSBG	25 57 33 S 26 10 55 S	028 14 53 028 04 30	1544 1806	17 44 26 20 17 45 11 00	012 42 36 4	- 26 44 00	#
UNION JOHSBG	26 10 55 S	028 04 30	1806	17 45 24.00	013 17 00		
UNION JOHSBG	26 10 55 S 34 54 31 S	028 04 30 302 04 03	1806	17 46 30.00 23 00 04.50	013 55 00 4 012 45 56	- 46 12 00	<b>.</b>
LAPLAT O ARG	34 54 31 S 34 54 31 S	302 04 03 302 04 03		23 00 48.40	012 53 25	03 35 42	*
LAPLAT O ARG	34 34 31 3	302 04 03		23 03 15.80	014 32 03	* - 20 18 42	
			26 MAY 19	58			
PT RICO A WI	18 10 31 N		408 7	00 31 00 19		10 35 24	_
CPTWN A S AF UNION JOHSBG	33 56 00 S 26 10 55 S	028 04 30	1806	03 06 45 40 03 09 47 00	002 10 00	* - 51 48 00	#
UNION JOHSBG LAPLAT O ARG	26 10 55 S 34 54 31 S		1806	03 11 47.00 08 21 24.40			
LAPLAT O ARG				08 23 10.00			
LAPLAT O ARG PERTH AUS	32 00 07 5	115 51 10	5	08 23 41•20 11 18 01•40	056 45 00	* - 46 17 36 48 25 00	*
PERTH AUS PRET B S AF	32 00 07 S 25 43 43 S		5 1311	11 18 54.30 16 31 42.40		49 18 00 # <b>-</b> 05 48 00	*
UNION JOHSBG			1806	16 31 49.6	014 00 00	# 01 48 00	•
DASHOL MOINU OBSHOL MOINU			1806 1806	16 34 49 • 00 18 17 42 • 00		<b>*</b> - 21 18 00	#
PRET B S AF	25 43 43 5	5 028 12 42	1311	18 18 46.0 18 19 03.3	009 42 00	#. = 14 12 00	#
OLFSFTN S AF				18 20 10.6			
UNION JOHSBO	26 10 55	5 028 04 30	1806	18 22 21•0 18 22 57•0	0 010 15 00	* - 56 30 00	*
PRET 8 S AF	F 25 43 43	S 028 12 42	1311	18 23 17.0 18 23 20.3	0 010 29 00	# - 61 18 00	#
55. 5. 11. 5 A					2 010 30 06		-

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STATION	LATITUDE	LDNGI TUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH DR RGT ASCEN *	ELEVATION OR DECLINATION#	SLANT RANGE IN KM
			26 MAY <b>195</b> 8	B (CONT)			
PRET 8 S AF UNION JOHS8G PRET 8 S AF SYONEY AUS SYONEY AUS	25 43 43 5 26 10 55 5 25 43 43 5 33 54 43 5 33 54 43 5	028 12 42 028 04 30 028 12 42 151 05 41 151 05 41	1311 1806 1311 15 15	18 23 35.00 18 23 40.00 18 25 04.00 18 54 38.70 18 57 09.00	010 39 00 * 010 49 00 * 012 30 00 * 019 15 00 * 021 42 00 *	- 64 30 00 * - 63 54 00 * - 75 00 00 * - 40 30 00 * 09 36 00 *	
SYDNEY AUS SYDNEY AUS PERTH AUS PERTH AUS PERTH AUS	33 54 43 5 33 54 43 5 32 00 07 5 32 00 07 5 32 00 07 5	151 05 41 151 05 41 115 51 10 115 51 10 115 51 10	15 15 5 5	18 59 21.50 18 59 32.00 20 39 09.00 20 41 33.80 20 41 51.80	001 07 30 * 001 25 30 * 150 34 00 131 28 00 126 13 00	- 10 42 00 * - 09 12 00 * 28 10 00 29 07 00 29 19 00	
LAPLAT D ARG LAPLAT O ARG LAPLAT D ARG LAPLAT D ARG LAPLAT D ARG	34 54 31 S 34 54 31 S 34 54 31 S 34 54 31 S 34 54 31 S	302 04 03 302 04 03 302 04 03 302 04 03 302 04 03		21 52 04 e 80 21 53 21 e 50 21 53 41 e 20 23 37 36 e 50 23 38 14 e 40	014 58 18 * 015 20 54 * 015 27 24 * 011 53 24 * 012 07 42 *	- 08 25 30 * - 14 56 30 * - 16 30 24 * - 16 57 42 * - 23 52 30 *	
LAPLAT D ARG LAPLAT O ARG LAPLAT D ARG	34 54 31 S 34 54 31 S 34 54 31 S	302 04 03 302 04 03 302 04 03		23 39 01e00 23 39 44e80 23 40 57e00	012 29 32 * 012 51 16 * 013 39 58 *	- 32 19 12 * - 39 57 54 * - 50 37 30 *	
			27 MAY 19	58			
UNION JDHS8G UNION JDHS8G OLFSFTN S AF UNION JOHS8G UNION JOHS8G	26 10 55 S 26 10 55 S 25 57 33 S 26 10 55 S 26 10 55 S	028 04 30 028 04 30 028 14 53 028 04 30 028 04 30	1806 1806 1544 1806 1806	03 47 08.00 03 47 19.20 03 49 40.72 03 49 57.40 03 49 58.00	022 28 G0 # 022 37 54 # 023 51 42 \$ 000 05 36 # 000 05 48 #	- 33 00 00 * - 27 18 00 * 24 06 00 * 28 49 00 * 28 49 00 *	
DLFSFTN S AF OLFSFTN S AF LAPLAT D ARG LAPLAT O ARG LAPLAT D ARG	25 57 33 S 25 57 33 S 34 54 31 S 34 54 31 S 34 54 31 S	028 14 53 028 14 53 302 04 03 302 04 03 302 04 03	1544 1544	03 49 59 89 03 5D 09 48 07 13 50 80 08 57 26 10 08 58 58 50	000 03 00 # 00D 03 24 # 001 36 09 # 017 10 01 # 021 04 33 #	30 09 00 * - 21 31 00 * - 74 36 30 *	6
LAPLAT D ARG LAPLAT D ARG LAPLAT D ARG LAPLAT D ARG ADLAID C AUS	34 54 31 S 34 54 31 S 34 54 31 S 34 54 31 S 34 44 00 S	302 04 03 302 04 03 302 04 03 302 04 03 138 40 00		09 00 31.90 09 01 29.50 09 01 35.90 09 02 45.80 10 09 30.00	022 43 30 4 023 13 17 4 023 16 04 4 023 41 06 4 012 31 00 4	- 11 49 42 # - 09 33 18 4 10 06 30 4	} •
PERTH AUS PRET B S AF UNION JOHSBG PRET B S AF UNION JOHSBG	32 00 07 S 25 43 43 S 26 10 55 S 25 43 43 S 26 10 55 S	115 51 10 028 12 42 028 04 30 028 12 42 028 04 30	5 1311 1806 1311 1806	11 58 25.90 17 00 10.08 17 05 13.00 17 08 05.00 17 08 10.00	154 02 00 013 20 00 4 011 28 00 4 012 27 00 4 012 32 00 4	14 42 00 4 - 16 18 00	
UNION JOHS 8G UNION JOHS 8G PRET 8 S AF UNION JOHS 8G PRET 8 S AF	26 10 55 S 26 10 55 S 25 43 43 S 26 10 55 S 25 43 43 S	028 04 30 028 04 30 028 12 42 028 04 30 028 12 42	1806 1806 1311 1806 1311	17 08 12.50 17 09 39.60 17 10 00.00 17 10 52.80 17 11 02.00	012 30 00 9 013 13 00 9 013 20 00 9 013 50 00 9 013 35 00	* - 31 30 00 4 - 36 00 00 4 - 41 48 00	*
UNION JOHSBG UNION JOHSBG SYONEY AUS SYDNEY AUS PERTH AUS	26 10 55 S 26 10 55 S 33 54 43 S 33 54 43 S 32 00 07 S	028 04 30 028 04 30 151 05 41 151 05 41 115 51 10	1806 1806 15 15	17 12 01.60 17 12 02.00 19 33 33.00 19 35 28.00 21 15 23.00	014 34 00 014 33 00 020 17 00 021 42 00 190 02 0D	* - 49 30 00 * - 13 54 00	*
PERTH AUS PERTH AUS PERTH AUS PERTH AUS LAPLAT D ARG	32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S 34 54 31 S	115 51 10 115 51 10 115 51 10 115 51 10 115 51 10 302 04 03	5 5 5 . 5	21 16 22.80 21 19 14.90 21 19 55.10 21 21 07.60 22 22 57.80	070 02 00 062 08 00 047 04 00	48 05 00 53 10 00 49 07 00 27 12 00 16 39 30	•
LAPLAT D ARG LAPLAT D ARG LAPLAT D ARG LAPLAT D ARG LAPLAT D ARG	34 54 31 S 34 54 31 S 34 54 31 S 34 54 31 S 34 54 31 S	302 04 03 302 04 03 302 04 03 302 04 03 302 04 03		22 23 47.90 22 25 18.20 22 26 56.00 22 28 33.50 22 28 55.10	013 26 43 014 D1 51 014 46 56	* - 01 15 06 * - 14 52 48 * - 25 12 24	* * *
LAPLAT D ARG		302 D4 03 302 04 03		22 29 00.30 22 29 34.30			
-nn And	24 74 72 3	202 07 03	28 MAY :		V., 1, 41	JI 05 42	.,
LAPLAT D ARG LAPLAT D ARG LAPLAT D ARG LAPLAT O ARG LAPLAT D ARG	34 54 31 S 34 54 31 S 34 54 31 S	302 04 03 302 04 03		00 13 38 67 00 14 25 65 00 15 45 62 00 16 19 64 00 17 00 69	0 009 57 50 0 009 57 44 0 010 16 31	* = 35 45 00 * = 39 17 06 * = 55 55 06	*
LAPLAT D ARC	34 54 31 S	302 04 03	3	0D 17 49.0	0 010 43 34	* - 70 37 54	*

STATION	LATITUDE	LONGI TUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION#	SLANT RANGE IN KM
			28 MAY 195	A (CONT)			
LAPLAT D ARG LAPLAT D ARG LAPLAT D ARG SALSBURY AUS SALSBURY AUS	34 54 31 S 34 54 31 S 34 54 31 S 34 43 58 S 34 43 58 S	302 04 03 302 04 03 302 04 03 138 38 47 138 38 47	32 32	07 43 19 • 20 07 46 42 • 60 07 48 07 • 60 09 31 09 • 92 09 31 21 • 59	001 55 26 # 001 44 30 # 001 20 45 # 026 30 00 029 52 12	- 58 39 36 * - 53 43 54 * - 34 50 00 * 56 22 48 57 52 37	·
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32	09 31 30.33 09 31 37.72 09 31 53.31 09 32 00.91 09 32 10.62	032 15 36 034 26 36 039 28 12 042 11 24 045 42 36	58 50 38 59 33 18 60 54 36 61 35 06 62 14 24	
SALSBURY AUS SALSBURY AUS LAPLAT O ARG SALSBURY AUS SALSBURY AUS	34 43 58 5 34 43 58 5 34 54 31 5 34 43 58 5 34 43 58 5	138 38 47 138 38 47 302 04 03 138 38 47 138 38 47	32 32 32 32	09 32 25.18 09 32 30.65 09 32 32.50 09 32 40.72 09 32 49.91	048 43 12 051 55 48 016 33 16 # 053 59 24 058 13 12	62 44 52 63 17 42 42 43 54 # 63 25 12 63 52 08	
LAPLAT O ARG LAPLAT D ARG LAPLAT D ARG LAPLAT D ARG	34 43 58 S 34 54 31 S 34 54 31 S 34 54 31 S 34 54 31 S	138 38 47 302 04 03 302 04 03 302 04 03 302 04 03	32	09 33 03.44 09 34 22.10 09 35 14.40 09 35 23.10 09 37 56.50	065 30 00 018 02 25 # 018 46 14 # 018 53 20 # 020 20 53 #	64 20 03 - 29 40 06 * - 18 38 30 * - 16 27 54 * 14 25 48 *	
LAPLAT D ARG PERTH AUS AOLAIO C AUS AOLAID C AUS PERTH AUS	34 54 31 S 32 00 07 S 34 44 00 S 34 44 00 S 32 00 07 S	302 04 03 115 51 10 138 40 00 138 40 00 115 51 10	5	09 39 25.90 10 43 16.80 10 48 46.00 10 50 15.00 12 31 21.30	021 33 24 # 079 46 00 # 014 40 00 # 240 18 00	38 20 12 * 44 14 00 - 66 19 48 * - 79 00 00 * 52 53 00	
UNION JOHSBG UNION JOHSBG UNION JOHSBG UNION JOHSBG LAPLAT O ARG	26 10 55 S 26 10 55 S 26 10 55 S 26 10 55 S 34 54 31 S	028 04 30 028 04 30 028 04 30 028 04 30 302 04 03	1806 1806 1806 1806	17 41 47.00 17 44 34.00 17 45 38.00 17 46 05.00 22 59 22.40	009 33 00 # 232 48 00 010 26 00 # 010 30 00 # 011 26 04 #	- 08 30 00 * 63 00 00 - 49 06 00 * - 53 48 00 * - 01 26 18 *	
LAPLAT O ARG LAPLAT O ARG LAPLAT D ARG LAPLAT O ARG LAPLAT D ARG	34 54 31 5 34 54 31 5 34 54 31 5 34 54 31 5 34 54 31 5	302 04 03 302 04 03 302 04 03 302 04 03 302 04 03		23 03 29.40 23 03 53.70 23 07 17.20 23 07 35.70 23 08 06.40	013 19 38 * 013 36 34 * 016 36 52 * 016 53 40 * 017 20 31 *	- 42 47 54 # - 46 02 12 # - 60 26 24 # - 60 36 06 # - 60 38 06 #	
			29 MAY 1958	Ü			
LAPLAT D ARG LAPLAT D ARG LAPLAT D ARG LAPLAT D ARG LAPLAT O ARG	34 54 31 S 34 54 31 S 34 54 31 S 34 54 31 S 34 54 31 S	302 04 03 302 04 03 302 04 03 302 04 03 302 04 03		00 49 02.80 00 49 37.10 00 50 39.20 00 52 49.90 00 53 19.70	008 38 40 # 008 37 08 # 008 27 50 # 008 08 13 # 008 00 41 #	- 29 24 18 # - 33 43 18 # - 42 28 24 # - 59 23 36 # - 63 28 06 #	
OLFSFIN S AF OLFSFIN S AF OLFSFIN S AF OLFSFIN S AF PRET B S AF	25 57 33 S 25 57 33 S 25 57 33 S 25 57 33 S 25 43 43 S	028 14 53 028 14 53 028 14 53 028 14 53 028 12 42	1544 1544 1544 1544 1311	02 58 12.02 02 58 21.62 02 58 35.16 02 58 45.75 03 09 00.30	000 17 30 # 000 19 24 # 000 21 42 # 000 24 36 # 022 13 00 #	- 17 13 00 # - 13 31 00 # - 08 04 00 # - 04 40 00 # - 60 18 00 #	
UNION JOHS8G UNION JOHS8G UNION JOHS8G PRET 8 S AF OLFSFTN S AF	26 10 55 S 26 10 55 S 26 10 55 S 25 43 43 S 25 57 33 S	028 04 30 028 04 30 028 04 30 028 12 42 028 14 53	1806 1806 1806 1311 1544	03 09 25.60 03 10 03.00 03 10 06.00 03 10 13.00 03 10 21.91	022 43 06 # 023 11 00 # 023 11 00 # 023 15 00 # 023 00 30 #	- 49 14 00 # - 33 48 00 # - 32 00 00 # - 32 42 00 # - 30 56 00 #	
OLFSFTN S AF UNION JOHSBG OLFSFTN S AF PRET B S AF OLFSFTN S AF	25 57 33 S 26 10 55 S 25 57 33 S 25 43 43 S 25 57 33 S	028 14 53 028 04 30 028 14 53 028 12 42 028 14 53	. 1544 1806 1544 1311 1544	03 10 21.91 03 11 10.00 03 11 24.83 03 11 47.50 03 13 07.10	023 13 24 # 023 43 00 # 023 32 48 # 023 55 12 # 000 16 00 #	- 27 12 00 # - 04 30 00 # - 02 12 00 # 06 30 00 #	N 31
TERRHAUT INO SALSBURY AUS SALSBURY AUS OILSBURY AUS SALSBURY AUS	39 31 38 N 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	272 36 10 138 38 47 138 38 47 138 38 47 138 38 47	155 32 32 32 32	07 52 41.10 09 31 09.92 09 31 21.56 09 31 30.33 09 31 37.72	270 00 00 026 30 00 029 52 12 032 15 36 034 36 36	26 56 00 # 82 28 00 56 22 48 57 52 37 58 50 38 59 33 18	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 5 34 43 58 5 34 43 58 5 34 43 58 5 34 43 58 5	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32	09 31 53.31 09 32 00.91 09 32 10.62 09 32 25.18 09 32 30.65	039 28 12 042 11 24 045 42 36 048 43 12 051 55 48	60 54 36 61 35 06 62 14 24 62 44 52	
SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47	32 32 32	09 32 40.72 09 32 49.91 09 32 57.29	053 59 24 058 13 12 062 25 48	63 17 42 63 25 12 63 52 08 64 11 06	

	* 1						
		LONGITUOE	HEIGHT	TIME GMT	AZIMUTH		LANT
STATION	LATITUOE	EAST	IN METERS	HR MIN SEC	OR RGT ASCEN #		RANGE In Km
			29 MAY 1958	(CONT)			
SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S	138 38 47 138 38 47	32 32	09 33 03 44 09 33 14 09	065 30 00 068 28 12	64 20 03 64 22 12	
SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S	138 38 47 138 38 47	32 32	09 33 21.06 09 32 30.03	072 41 24 075 57 36	64 12 54 64 10 30	
SALSBURY AUS	34 43 58 S	138 38 47	32	09 33 37.98	081 04 12	63 54 54	
SALSBURY AUS	34 43 58 S	138 38 47	32	09 33 46.79	083 13 12	63 29 49	
SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S	138 38 47 138 38 47	32 32	09 33 55.51 09 34 00.55	086 49 12 089 22 12	63 04 48 62 38 24	
SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S	138 38 47 138 38 47	32 32	09 34 10.79 09 34 26.86	091 35 24 095 43 12	62 14 24 61 31 58	
SALSBURY AUS	34 43 58 5	138 38 47	32	09 34 43.02	100 42 00	60 08 42	
SALSBURY AUS SALSBURY AUS	34 43 58 5 34 43 58 5	138 38 47 138 38 47	32 32	09 34 51.24 09 34 59.41	105 13 12 107 20 24	58 39 18 57 50 06	
AOLAID C AUS	34 44 00 S	138 40 00		09 35 12.00	014 50 00 #	- 40 30 00 *	
SALSBURY AUS	34 43 58 5	138 38 47	32	09 35 15.92	109 49 12	56 59 24	
SALSBURY AUS	34 43 58 S 34 43 58 S	138 38 47 138 38 47	32 32	09 35 24.05 09 35 30.98	113 26 24 115 04 48	55 14 42 54 16 30	
SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S	138 38 47 138 38 47	32 32	09 35 48.00 09 36 02.89	116 28 12 119 43 48	53 24 18 51 31 30	
SALSBURY AUS	34 43 58 S	138 38 47	32	09 36 17.69	121 49 12	49 40 37	
SALSBURY AUS SALSBURY AUS	34 43 58 5 34 43 58 5	138 38 47 138 38 47	32 32	09 36 35.56 09 36 51.47	123 58 12 126 19 48	47 57 00 45 54 54	
SALSBURY AUS	34 43 58 S	138 38 47	32	09 36 59.38	127 53 24	44 09 36	
SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S	138 38 47 138 38 47	32 32	09 37 08.03 09 37 23.85	128 48 36 129 41 24	43 12 00 42 27 54	
SALSBURY AUS	34 43 58 S	138 38 47	32	09 37 31.88	131 07 48	40 42 54	
SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S	138 38 47 138 38 47	32 32	09 37 47.20 09 37 55.74	131 45 36 133 00 00	39 44 42 38 12 54	
SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S	138 38 47 138 38 47	32 32	09 38 04.24 09 38 19.70	133 33 00 134 09 00	37 18 54 36 25 30	
ADLAID C AUS	34 44 00 S	138 40 00		11 19 52.00	084 80 00 *	- 27 30 00 +	
ADLATO C AUS	34 44 00 S 26 10 55 S	138 40 00	1004	11 26 18.00	005 00 00 *	- 80 00 00 *	
UNION JOHSBG UNION JOHSBG	26 10 55 5	028 04 30 028 04 30	1806 1806	16 30 49.00 16 33 39.00	012 43 00 <b>*</b> 014 03 00 <b>*</b>	- 41 12 00 *	
UNION JOHS 8G	26 10 55 S	028 04 30	1806	16 33 41.00	014 04 00 *	- 40 48 00 *	
DBSHOL NOINU DBSHOL NOINU	26 10 55 S 26 10 55 S	028 04 30 028 04 30	1806 1806	16 34 48.50 18 18 52.00	014 42 00 # 008 26 00 #		
ADLAID C AUS AOLAID C AUS	34 44 00 5 34 44 00 5	138 40 00 138 40 00		20 41 17.00 20 44 09.00	018 20 00 * 019 27 00 *		
AOLATO C AUS	34 44 00 S	138 40 00		20 46 18.00	020 30 00 4		
			30 MAY 19	58			
UNION JOHSEG	26 10 55 S	028 04 30	1806	03 43 55.20	018 30 54 +		
DBZHOL MOINU DBZHOL MOINU	26 10 55 S 26 10 55 S	028 04 30 028 04 30	1806 1806	03 44 13.00 03 44 27.00	018 43 00 1 018 55 12 1		
UNION JOHSBG UNION JOHSBG	26 10 55 S 26 10 55 S	028 04 30 028 04 30	1806 1806	03 45 02•30 03 45 40•40	019 23 30 4 019 48 00 4		
OLFSFIN'S AF	25 57 33 5	028 14 53	1544	03 46 07•65	019 57 30		
LAPLAT D ARG	34 54 31 S 34 54 31 S	302 04 03 302 04 03		08 56 53.80 08 57 44.60	018 52 40 019 38 29	* - 22 46 18 *	
LAPLAT O ARG	34 54 31 S 34 54 31 S	302 04 03 302 04 03		08 57 58.90	019 50 54	* - 03 09 36 *	
LAPLAT O ARG				08 58 34•20		•	
LAPLAT D ARG	34 54 31 S 34 54 31 S	302 04 03 302 04 03		08 58 53 60 08 58 59 50	020 36 03	* 14 25 48 *	
LAPLAT O ARG AOLAIO C AUS		302 04 03 138 40 00		09 00 15.80 10 09 12.00	011 23 00	* - 54 18 00 *	
ADLAIO C AUŞ	34 44 00 S	138 40 00		11 52 05.00		* - 13 30 00 *	
UNION JOHSBG UNION JOHSBG		028 04 30 028 04 30	1806 1806	17 04 57.00 17 06 50.00		72 30 00 * = 50 00 00 *	
OLFSFTN S AF UNION JOHSBG	25 57 33 S	028 14 53 028 04 30	1544	17 07 41.96 17 09 10.40	011-12-00	* - 58 25 00 *	
UNION JOHSEG		028 04 30		17 09 10.60			
			31 MAY 1	958			
UNION JOHS		028 04 30		02 30 54.00		51 36 00	
SALSBURY AUS	34 43 58 \$	138 38 47	32	08 48 30.99 08 48 46.00	010 30 32	31 26 27 32 58 04	
WOOMER AUS WOOMER AUS				08 48 52•00 08 49 00•2		41 32 56 42 22 19	

		LONGITUOE	HEIGHT IN	TIME GMT IN	AZIMUTH OR	ELEVATION OR	SLAF
STATION	LATITUOE	EAST	METERS	HR MIN SEC	RGT ASCEN *	OECLINATION*	IN
			31 MAY 1958	(CONT)			
SALSBURY AUS WOOMER AUS SALSBURY AUS WOOMER AUS WOOMER AUS	34 43 58 S 31 06 07 S 34 43 58 S 31 06 07 S 31 06 07 S	138 38 47 136 47 07 138 38 47 136 47 07 136 47 07	32 162 32 162 162	08 49 06:17 08 49 11:11 08 49 20:60 08 49 22:84 08 49 34:12	012 27 00 026 09 39 013 55 12 028 01 15 030 14 56	34 51 00 43 33 00 36 23 24 44 39 39 45 52 04	
SALSBURY AUS WOOMER AUS SALSBURY AUS WOOMER AUS SALSBURY AUS	34 43 58 S 31 06 07 S 34 43 58 S 31 06 07 S 34 43 58 S	138 38 47 136 47 07 138 38 47 136 47 07 138 38 47	32 162 32 162 32	08 49 40.18 08 49 47.52 08 49 55.58 08 50 01.58 08 50 11.82	016 06 57 032 56 20 018 04 48 035 52 51 020 18 36	38 31 12 47 09 18 40 03 39 48 29 31 41 48 54	
WOOMER AUS SALSBURY AUS WOOMER AUS SALSBURY AUS WOOMER AUS	31 06 07 S 34 43 58 S 31 06 07 S 34 43 58 S 31 06 07 S	136 47 07 138 38 47 136 47 07 138 38 47 136 47 07	162 32 162 32 162	08 50 21.16 08 50 37.12 08 50 37.58 08 50 52.51 08 50 53.90	040 23 24 024 22 30 044 38 20 026 47 27 048 57 03	50 11 16 44 24 39 51 28 01 46 01 19 52 35 27	
SALSBURY AUS WOOMER AUS SALSBURY AUS WOOMER AUS WOOMER AUS	34 43 58 S 31 06 07 S 34 43 58 S 31 06 07 S 31 06 07 S	136 38 47 136 47 07 138 38 47 136 47 07 136 47 07	32 162 32 162 162	08 51 16.28 08 51 16.82 08 51 32.20 08 51 34.00 08 51 52.28	031 28 51 055 33 32 034 57 32 060 58 08 067 10 55	48 13 22 53 52 08 49 42 36 54 31 48 54 58 44	
SALSBURY AUS WOOMER AUS WOOMER AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 31 06 07 S 31 06 07 S 34 43 58 S 34 43 58 S	138 38 47 136 47 07 136 47 07 138 38 47 138 38 47	32 162 162 32 32	08 51 57.60 08 52 00.20 08 52 13.25 08 52 13.96 08 52 27.80	040 57 43 069 13 44 072 55 40 045 16 44 049 07 12	51 51 18 55 03 36 55 05 20 53 03 07 53 57 32	
SALSBURY AUS WOOMER AUS WOOMER AUS SALSBURY AUS WOOMER AUS	34 43 58 S 31 06 07 S 31 06 07 S 34 43 58 S 31 06 07 S	138 38 47 136 47 07 136 47 07 138 38 47 136 47 07	32 162 162 32 162	08 52 41.82 08 52 50.28 08 53 02.56 02 53 08.25 08 53 14.30	053 18 32 085 03 54 088 15 57 061 31 51 091 38 06	54 40 48 54 16 48 53 51 18 55 44 56 53 09 25	
WOOMER AUS SALSBURY AUS WOOMER AUS SALSBURY AUS WOOMER AUS	31 06 07 S 34 43 58 S 31 06 07 S 34 43 58 S 31 06 07 S	136 47 07 138 38 47 136 47 07 138 38 47 136 47 07	162 32 162 32 162	08 53 23.77 08 53 26.21 08 53 31.43 08 53 40.78 08 53 41.31	094 05 27 067 26 52 096 10 15 072 09 25 098 25 33	52 44 06 56 00 39 52 13 33 56 04 44 51 38 24	
WOOMER AUS WOOMER AUS SALSBURY AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 06 S 34 43 58 S 31 06 06 S 31 06 06 S	136 47 07 136 46 54 138 38 47 136 46 54 136 46 54	162 162 32 162 162	08 53 49.70 08 54 03.18 08 54 05.46 08 54 11.37 08 54 19.57	100 41 45 013 38 42 4 080 06 36 013 42 42 4 013 47 00 4	55 44 27 - 32 03 00	•
WOOMER AUS SALSBURY AUS AOLAIO C AUS WOOMEP AUS SALSBURY AUS	31 06 06 S 34 43 58 S 34 44 00 S 31 06 06 S 34 43 58 S	136 46 54 138 38 47 138 40 00 136 46 54 138 38 47	162 32 162 32	08 54 27.76 08 54 29.79 08 54 47.00 08 54 59.50 08 55 00.53	013 51 30 4 087 32 02 013 30 00 4 013 55 42 4 095 59 27	54 47 52 - 28 30 00	•
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32	08 55 18.20 08 55 33.65 08 55 50.21 08 56 09.87 08 56 30.17	100 18 03 103 53 27 107 33 28 110 55 15 114 28 51	51 43 51 50 31 19 49 08 31 47 26 06 45 28 48	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47		08 56 56.24 08 57 19.05 08 57 43.58 08 58 12.30 08 58 40.00	118 21 36 121 20 20 124 00 39 127 02 27 129 13 32	42 59 20 40 55 26 38 34 22 35 58 40 33 23 31	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47	32 32 32	08 59 14.16 08 59 52.71 09 01 53.83 09 00 26.49 09 00 57.20	135 53 31	30 26 06 27 16 40 18 19 48 24 34 19 22 17 27	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47	32 32 32 32	09 01 23e17 09 02 08e60 09 02 41e64 09 03 17e38 09 03 30e89	140 06 36 141 04 19 142 06 32	20 32 56 17 25 40 15 16 04 13 10 44 12 15 00	
SALSBURY AUS SALSBURY AUS WOOMER AUS WOOMER AUS WOOMER AUS	34 43 58 3 31 06 07 3 31 06 07 3	138 38 41 136 47 0 136 47 0	7 32 7 162 7 162	09 03 54.12 09 04 11.09 10 37 58.79 10 38 24.39 10 38 37.79	143 19 08 271 06 00 267 09 21	10 57 00 10 03 43 37 01 48 37 30 00 38 17 45	

STATION	LATITUOE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			31 MAY 1958	(CONT)			
WOOMER AU: WOOMER AU: WOOMER AU: AOLAIO C AU: WOOMER AU:	31 06 07 S 31 06 07 S 34 44 00 S	136 47 07 136 47 07 136 47 07 138 40 00 136 47 07	162 162 162 162	10 39 01.92 10 39 16.54 10 39 54.24 10 40 15.00 10 40 54.72	260 51 39 258 12 39 249 51 54 008 40 00 # 238 07 15	39 38 56 40 21 07 42 10 15 - 27 00 00 * 43 23 31	
WOOMER AU WOOMER AU WOOMER AU WOOMER AU WOOMER AU	31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	10 41 10.55 10 41 19.22 10 41 28.10 10 41 50.05 10 42 09.49	234 43 26 . 232 52 19 230 56 34 226 20 20 222 14 56	43 26 56 43 26 31 43 25 08 43 05 27 42 42 03	
WOOMER AU WOOMER AU WOOMER AU WOOMER AU WOOMER AU	S 31 06 07 S S 31 06 07 S S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	10 4? 22.52 10 42 39.10 10 42 57.43 10 43 10.29 10 43 36.46	219 37 12 216 23 52 213 05 49 210 42 36 205 59 31	42 21 07 41 46 55 41 07 01 40 31 48 39 11 06	
WOOMER AL WOOMER AL WOOMER AL WOOMER AL	S 31 06 07 S S 31 06 07 S S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	10 43 58.23 10 44 15.57 10 44 40.43 10 44 57.17 10 45 13.25	202 26 56 199 50 52 196 17 34 194 04 19 192 01 22	37 59 24 36 58 15 35 25 19 .34 21 00 33 17 20	
	JS 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	10 45 28.90 10 45 45.47 10 46 01.04 10 46 24.68 10 46 41.64	190 11 45 188 19 40 186 41 38 184 18 36 182 45 10	32 16 19 31 09 00 30 04 58 28 29 45 27 21 21	
WOOMER A WOOMER A WOOMER A	JS 31 06 07 S JS 31 06 07 S JS 31 06 07 S US 31 06 07 S JS 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	10 47 47.65 10 47 55.70 10 48 10.72 10 48 26.35 10 48 49.65	177 24 03 176 45 43 175 46 15 174 39 10 173 10 57	22 59 49 22 27 43 21 33 36 20 30 43 19 03 36	
WOOMER A ADLAID C A	US 31 06 07 S US 34 44 00 S	136 47 07 138 40 00	162	10 48 59.79 20 03 10.00	172 35 27 018 53 00 *	18 25 55 17 30 00 4	
			1 JUN 19	58		•	
SALSBURY A SALSBURY A SALSBURY A SALSBURY A SALSBURY A	US 34 43 58 S US 34 43 58 S US 34 43 58 S	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32	09 24 10.01 09 24 22.09 09 24 54.34 09 25 09.87 09 25 24.39	327 17 42 326 46 48 325 29 24 324 11 09 322 59 20	54 38 31 56 51 00 52 31 15 65 18 36 68 10 44	
SALSBURY /	US 34 43 58 S US 31 06 07 S	136 47 07 138 38 47 138 38 47 136 47 07 138 38 47	162 32 32 162 32	09 25 37.88 09 25 40.99 09 25 58.14 09 25 59.19 09 26 13.56	259 36 36 321 18 36 318 50 09 210 26 56 315 25 08	85 02 06 71 10 40 74 28 55 84 14 31 77 26 52	
SALSBURY	AUS 31 06 07 S AUS 34 44 00 S	136 47 07 138 38 47 136 47 07 138 40 00 138 38 47	162 32 162 32	09 26 16.44 09 26 30.42 09 26 30.47 09 26 57.00 09 27 01.69	180 49 26 309 01 55 180 53 42 010 56 00 270 33 28	31 45 36 80 44 45 79 17 06 33 30 00 85 46 19	*
SALSBURY WOOMER SALSBURY	AUS 31 06 07 S	138 38 47 136 47 07 138 38 47	162 32 162 32 162	09 27 04.11 09 27 20.38 09 27 28.71 09 27 37.14 09 27 46.06	216 51 03 156 33 32 187 38 38	73 08 16 85 51 28 68 36 02 53 33 03 65 33 54	
SALSBURY WOOMER SALSBURY WOOMER SALSBURY	AUS 31 06 07 S AUS 34 43 58 S AUS 31 06 07 S	136 47 07 138 38 47 136 47 07	32 162 32 162 32	09 27 51.17 09 23 01.22 09 28 06.29 09 28 11.83 09 28 23.15	163 34 55 170 47 51 160 17 06	81 12 32 62 52 22 78 17 27 52 37 04 75 06 46	
WOOMER SALSBURY WOOMER SALSBURY SALSBURY	AUS 31 06 07 5 AUS 34 43 58 5	138 38 47 136 47 07 138 38 47	162 32 162 32 32	09 28 26.22 09 28 56.64 09 29 11.83 09 29 14.72 09 29 27.92	162 00 32 160 17 06 160 33 36	58 43 37 68 46 08 52 37 04 65 34 51 63 15 03	
SALSBURY SALSBURY SALSBURY SALSBURY SALSBURY	AUS 34 43 58 5 AUS 34 43 58 5 AUS 34 43 58 5	5 138 38 47 5 138 38 47 5 138 38 47		09 29 43.57 09 30 00.06 09 30 15.09 09 30 33.77 09 30 56.83	5 158 12 00 157 34 55 7 156 59 52	60 43 22 58 04 01 55 34 12 52 42 00 49 23 27	
SALSBURY	AUS 34 43 58	S 138 38 47	32	09 31 37.69	9 · 155 32 24	43 46 08	

STATION	LATITUDE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLAM RANG IN 1
			1 JUN 1958	(CONT)			
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32	09 31 54.07 09 32 24.14 09 32 42.09 09 32 58.49 09 33 21.31	155 12 39 154 55 08 154 41 24 154 28 55 154 13 40	41 48 57 38 17 20 36 10 51 34 31 48 32 10 19	
UNION JOHSBG UNION JOHSBG PRET B S AF UNION JOHSBG UNION JOHSBG	26 10 55 S 26 10 55 S 25 43 43 S 26 10 55 S 26 10 55 S	028 04 30 028 04 30 028 12 42 028 04 30 028 04 30	1806 1806 1311 1806 1806	16 22 57.10. 16 24 15.00 16 25 20.80 16 26 19.00 16 27 16.00	010 06 30 # 294 30 00 010 5B 00 # 011 37 00 # 012 14 00 #	- 12 18 00 * 84 30 00 - 42 00 00 * - 50 12 00 * - 58 18 00 *	
UNION JOHSBG PRET B S AF LAPLAT C ARG LAPLAT C ARG	26 10 55 S 25 43 43 S 34 54 26 S 34 54 26 S	028 04 30 028 12 42 302 05 30 302 05 30	1806 1311	16 27 30.20 16 31 11.20 21 44 53.00 21 45 58.60	012 22 00 # 016 2B 00 # 014 18 06 # 015 01 54 #	- 59 30 00 * - 71 00 00 * - 42 19 48 * - 47 02 42 *	
SAL SPURM INTO			2 JUN 1958	3			
SALSBURY AUS SALSBURY AUS SALSBURY AUS ADLAID A AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 55 14 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 36 14 138 38 47	32 32 32 55 32	09 59 21.40 09 59 34.73 09 59 59.68 10 00 00.00 10 00 15.21	270 30 39 268 00 00 262 21 32 247 00 00 258 48 00	46 25 12 47 24 36 49 14 38 53 00 00 50 16 22	
SALSBURY AUS ADLAID A AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 55 14 S 34 43 58 S 34 43 58 S 34 43 58 S	136 38 47 138 36 14 138 38 47 138 38 47 138 38 47	32 55 32 32 32	10 00 30.91 10 00 42.00 10 00 56.23 10 01 28.97 10 01 59.59	254 47 52 236 00 00 248 05 38 238 43 15 230 00 00	51 05 31 54 00 00 52 09 00 53 03 18 53 01 04	
SALSBURY AUS WOOMER AUS WOOMER AUS WOOMER AUS	34 43 58 S 31 06 07 S 31 06 06 S 31 06 06 S 31 06 07 S	138 38 47 136 47 07 136 46 54 136 46 54 136 47 07	32 162 162 162 162	10 02 17.11 10 04 06.82 10 94 11.85 10 04 44.71 10 05 03.83	224 59 52 182 37 51 009 30 00 # 019 44 00 # 177 34 51	52 43 12 33 04 19 - 87 30 00 * - 88 48 00 * 28 36 36	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	10 05 18.70 10 05 27.58 10 05 44.20 10 06 01.90 10 06 21.30	176 29 20 175 46 15 174 37 33 173 34 08 172 06 32	27 31 19 26 46 15 25 34 51 24 24 28 22 44 34	. =
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	10 06 32.92 10 07 04.84 10 07 13.70 10 07 29.66 10 07 46.47	171 32 24 169 46 58 169 21 14 168 33 32 157 44 42	22 04 30 · 19 55 51 19 16 51 18 16 51 17 14 20	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	10 08 10.24 10 08 27.07 10 08 43.64 10 09 00.08 10 09 22.93	166 44 02 165 57 14 165 20 31 164 40 37 163 48 50	15 48 00 14 41 24 13 44 27 12 46 30 11 26 38	
WOOMER AUS WOOMER AUS WOOMER AUS CPTWN A S AF UNION JOHSBG	31 06 07 S 31 06 07 S 31 06 07 S 33 56 00 S 26 10 55 S	136 47 07 136 47 07 136 47 07 018 28 37 028 04 30	162 162 162 7 1806	10 09 40.09 10 09 54.22 10 10 12.56 16 54 18.20 16 57 17.00	163 10 15 162 35 20 162 04 44 009 44 00 # 008 18 00 #	10 27 39 09 31 15 08 41 52 10 42 00 #	
CPTWN A S AF BLOMFIN S AF BLOMFIN S AF BLOMFIN S AF OLFSFIN S AF	33 56 00 S 29 06 19 S 29 06 19 S 29 06 19 S 25 57 33 S	018 28 37 026 13 35 026 13 35 026 13 35 028 14 53	7 1634 1634 1634 1544	16 58 18.00 16 58 23.44 16 59 50.00 17 00 11.00 17 00 30.92	000 00 00 008 18 1B * 009 12 00 * 179 36 00 00B 2B 10 *	B5 00 00 - 47 30 00 # - 59 00 00 # 40 00 00 - 66 54 00 #	
BLOMFTN S AF	29 06 19 S	026 13 35	1634	17 02 28.00	010 53 00 *	- 80 12 00 *	
			3 JUN 1958	3			
LIMA PERU UNION JOHSBG UNION JOHSBG BLOMFTN S AF UNION JOHSBG	11 55 43 S 26 10 55 S 26 10 55 S 29 06 19 S 26 10 55 S	283 17 58 028 04 30 028 04 30 026 13 35 028 04 30	1361 1806 1806 1634 1806	04 28 30.00 17 29 00.00 17 30 16.00 17 31 24.18 17 32 13.20	060 00 00 007 10 24 # 007 08 00 # 006 54 42 # 006 49 00 #	45 00 00 - 29 30 00 * - 39 48 00 * - 47 45 00 * - 53 36 00 *	
BLOMFTN S AF	29 06 19 S	026 13 35	1634	17 32 35.00	006 54 00 #	- 61 54 00 *	

,		LONGITUOE	HEIGHT IN	TIME GMT	AZIMUTH	ELEVATION
STATION	LATITUOE	EAST		IN R MIN SEC	OR RGT ASCEN *	OR OECLINATION*
			4 JUN 1958			
PRET 8 S AF UNION JOHSBG UNION JOHSBG UNION JOHSBG PRET 8 S AF	25 43 43 S 26 10 55 S 26 10 55 S 26 10 55 S 25 43 43 S	028 12 42 028 04 30 028 04 30 028 04 30 028 12 42	1806 1 1806 1 1806 1	6 13 51.30 6 13 56.20 6 15 07.00 6 15 30.00 6 16 35.70	008 37 00 * 008 41 30 * 008 55 00 * 009 04 00 * 009 23 00 *	- 43 00 00 * - 42 30 00 * - 54 36 00 * - 58 36 00 * - 69 00 00 *
LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	34 54 26 5 34 54 26 5 34 54 26 5 34 54 26 5 34 54 26 5	302 05 30 302 05 30 302 05 30 302 05 30 302 05 30	2 2 2	1 31 46.30 1 32 09.20 1 35 01.00 1 39 35.00 3 19 03.30	011 49 30 * 012 06 04 * 014 52 47 * 018 21 59 * 007 11 14 *	- 45 05 06 # - 48 27 30 # - 62 44 54 # - 57 08 54 # - 43 49 00 #
LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG STIAGO R CHI	34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S 33 33 42 S	302 05 30 302 05 30 302 05 30 302 05 30 289 18 48	2 2 2	3 19 11.20 3 20 31.50 3 21 21.50 3 23 47.20 3 26 06.50	007 09 29 * 006 53 55 * 006 36 43 * 004 25 33 * 020 39 30 *	- 44 47 42 * - 55 12 42 * - 61 29 18 * - 75 44 36 * - 66 34 00 *
			5 JUN 1958			
UNION JOHS8G UNION JOHS8G UNION JOHS8G OLFSFTN S AF PRET B S AF	26 10 55 S 26 10 55 S 26 10 55 S 26 10 55 S 25 57 33 S 25 43 43 S	028 04 30 028 04 30 028 04 30 028 14 53 028 12 42	1806 1: 1806 1: 1544 1:	6 44 07.80 6 45 20.00 6 45 38.60 6 45 46.40 6 46 27.40	007 03 00 # 007 02 00 # 007 00 00 # 006 55 10 # 006 53 00 #	- 30 54 00 * - 40 00 00 * - 43 24 00 * - 45 08 00 * - 50 30 00 *
UNION JOHSBG UNION JOHSBG OLFSFIN S AF PRET 8 S AF BLOMFIN S AF	26 10 55 S 26 10 55 S 25 57 33 S 25 43 43 S 29 06 19 S	028 04 30 028 04 30 028 14 53 028 12 42 026 13 35	1806 1: 1544 1: 1311 1:	6 46 27.60 6 47 58.00 6 48 36.23 6 49 01.00 6 49 21.00	006 57 00 * 006 40 00 * 006 25 30 * 006 12 00 * 006 56 00 *	- 49 42 00 * - 61 36 00 * - 66 04 00 * - 69 00 00 * - 71 25 00 *
OLFSFTN S AF BLOMFTN S AF	25 57 33 5 29 06 19 5	028 14 53 026 13 35	1544 1634	6 50 51.32 6 53 12.00	004 30 06 * 022 34 00 *	- 79 10 00 # - 80 27 00 #
			6 JUN 1958			30 2, 30 1
ADLAIO C AUS OLFSFIN S AF OLFSFIN S AF UNION JOHSBG OLFSFIN S AF	34 44 00 S 25 57 33 S 25 57 33 S 26 10 55 S 29 57 33 S	138 40 00 028 14 53 028 14 53 028 04 30 028 14 53	1544 1: 1544 1: 1806 1:	0 15 26.00 7 17 18.34 7 18 50.00 7 19 20.50 7 21 14.19	006 58 30 * 006 08 42 * 005 50 18 * 005 40 30 * 004 51 06 *	- 16 00 00 * - 44 07 00 * - 53 08 00 * - 56 12 00 * - 65 30 00 *
			7 JUN 1958			
UNION JOHSBG UNION JOHSBG UNION JOHSBG	26 10 55 S 26 10 55 S 26 10 55 S	028 04 30 028 04 30 028 04 30	1806 19 1806 16	5 58 14.20 5 59 15.00 6 00 46.00	007 07 12 * 007 08 30 * 007 10 00 *	- 39 36 00 * - 49 00 00 * - 62 00 00 *
CCNAV FLA	28 2 <b>9</b> 33 N	279 25 27	8 JUN 1958		•	
SSLVOR A 8WI AOLAIO C AUS SSLVOR A 8WI SSLVOR A 8WI	24 07 23 N 34 44 00 S 24 07 23 N 24 07 23 N	285 32 53 138 40 00 285 32 53 285 32 53	01	9 26 00.00 9 27 14.68 9 27 47.00 9 28 15.16 9 28 30.00	194 44 24 104 43 48 006 44 00 * 034 13 12 033 06 36	26 37 12 67 28 48 - 14 18 00 * 24 11 24 21 09 36
PRET B S AF	25 43 43 S 33 56 00 S	028 12 42 018 28 37	1311 16	5 26 58.40	006 12 00 *	- 29 36 00 *
			9 JUN 1958	8 34 12,00	000 00 00	34 48 00
PT RICO A WI PT RICO A WI WOOMER AUS ALBUG B NM	18 10 31 N 18 10 31 N 31 06 06 S 35 06 37 N	292 54 42 292 54 42 136 46 54 253 27 47	408 09 408 09 162 09	9 01 49.72 9 02 09.60 9 22 59.71 0 49 37.00	298 34 12 310 40 12 003 19 30 * 103 00 00	17 55 48 16 33 36 - 75 22 00 * 04 42 00
SHIRAZ IRAN	20 44 44		10 JUN 1958			
HOOMER AUS WOOMER AUS WOOMER AUS C CNAV G FLA	29 38 40 N 31 06 06 S 31 06 06 S 31 06 06 S 28 16 17 N	052 31 33 136 46 54 136 46 54 136 46 54 279 23 37	162 08 162 08 162 08	0 46 10.00 3 43 57.57 3 44 14.02 3 44 30.46 9 30 25.50	001 10 00 # 005 38 30 # 005 30 48 # 005 21 30 # 098 09 57	60 00 00 * - 65 04 00 * - 67 04 00 * - 68 54 00 * 75 10 10
C CNAV G FLA	28 16 17 N 28 16 17 N 28 16 17 N 28 16 17 N 28 16 17 N	279 23 37 279 23 37 279 23 37 279 23 37 279 23 37	11 09 11 09 11 09 11 09	30 25.75 30 26.00 30 26.25 30 26.75 30 27.00	096 40 48 094 58 15 093 55 15 090 54 18	75 10 19 75 21 39 75 19 08 74 57 21 74 32 24
C CNAV G FLA	28 16 17 N	279 23 37		30 27.00	089 02 24	74 19 51
			0,	21000	085 53 24	73 38 42

SLANT RANGE IN KM

STATION	LATITUOE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			10 JUN 1956	(CONT)			
C CNAV G FLA	28 16 17 N	279 23 37	11	09 30 27.75	084 22 15	73 19 12	
C CNAV G FLA 8RISTDL TENH ALMGROD A NM TUCSON ARIZ	28 16 17 N 36 35 03 N 32 52 24 N 32 13 59 N	279 23 37 277 50 31 254 02 58 249 03 51	11 527 1335 227	09 30 28 • 00 09 34 30 • 00 11 17 18 • 00 11 17 35 • 00	082 47 24 138 00 00 023 56 00 * 115 00 00	73 05 42 18 00 00 03 00 00 # 19 00 00	
KASHIWABRA J KASHIWABRA J KASHIWABRA J	34 30 24 N 34 30 24 N 34 30 24 N	135 48 15 135 48 15 135 48 15	6 <b>6</b> 66 66	14 44 36.71 14 44 48.73 14 45 02.73	016 07 18 * 015 56 42 * 015 41 06 *	03 30 40 # 40 20 00 # 48 24 00 #	
			11 JUN 195	8			
WOOMER AUS WOOMER AUS WOOMER AUS C CNAV H FLA N ORLS AD LA	31 06 06 5 31 06 06 5 31 06 06 5 28 24 29 N 29 57 30 N	136 46 54 136 46 54 136 46 54 279 24 44 269 58 34	162 162 162 12 2	09 07 00.35 09 07 38.49 09 10 16.97 09 41 00.00 09 59 05.00	005 50 06 * 005 43 00 * 005 31 00 * 010 56 00 090 00 00	- 22 56 00 # - 32 52 00 # - 43 06 00 # 22 22 12 79 00 00	= :
BILOXI MISS WHTIER A CAL EDW AF D CAL EDW AF D CAL EDW AF D CAL	30 23 27 N 33 58 40 N 34 56 43 N 34 56 43 N 34 56 43 N	271 08 28 241 58 25 242 04 58 242 04 58 242 04 58	7 149 785 785 785	09 59 12.00 11 43 51.00 11 44 36.00 11 44 40.00 11 45 05.00	270 00 00 023 54 00 # 125 16 48 121 41 20 095 42 54	82 00 00 28 00 00 * 26 24 39 26 58 48 24 54 43	5.4
EDW AF D CAL EDW AF D CAL EDW AF D CAL EOW AF D CAL EDW AF D CAL	34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	242 04 58 242 04 58 242 04 58 242 04 58 242 04 58	785 785 785 785 785	11 45 11.00 11 45 36.00 11 46 06.00 11 46 36.00 11 47 06.00	090 13 30 072 16 51 059 33 25 050 35 52 046 38 24	23 52 10 18 43 48 13 02 20 08 48 28 05 43 12	
EDW AF D CAL Shiraz Iran	34 56 43 N 29 38 40 N	242 04 58 052 31 33	785 1600 12 JUN 19	11 47 36.00 23 58 00.00	042 50 09 003 27 00 #	02 54 32 32 30 00 *	
ALMGDO-GS.NM S ANT 8 TEX ALMGDO-GS.NM EDINBURG TEX ALMGOO-GS.NM	32 52 22 N 29 27 34 N 32 52 22 N 26 18 20 N 32 52 22 N	254 03 05 261 29 16 254 03 05 261 49 39 254 09 05	1339 1339 28 1339	10 26 00.00 10 26 00.00 10 26 07.00 10 26 07.20 10 26 16.00	001 09 00 * 270 00 00 001 19 00 * 350 00 00 001 34 00 *	- 05 50 00 # 62 30 00 # - 02 35 00 # 20 30 00 01 50 00 #	
LAWTON DKLA EDINBURG TEX WICHITA KAN DALLAS TEX OK CY A DKLA	34 39 44 N 26 18 20 N 37 41 44 N 32 51 10 N 35 33 50 N	261 35 47 261 49 39 262 45 19 263 14 29 262 29 20	358 28 413 172 360	10 26 25.00 10 26 26.70 10 26 53.90 10 27 14.60 10 27 18.00	179 42 00 005 00 00 021 18 50 = 000 48 12 =	40 12 00 11 15 00 - 24 42 00 # 83 28 06 4 62 00 00	
EDINBURG TEX ALBUG 8 NM LAWTON DKLA MIL RAD MASS MIL RAD MASS	26 18 20 N 35 06 37 N 34 39 44 N 42 37 03 N 42 37 03 N	261 49 39 253 27 47 261 35 47 288 30 28 288 30 28	28 1667 358 155 155	10 27 20.40 10 27 32.00 10 28 54.00 17 51 59.00 17 57 49.00	009 30 00 002 42 00 035 42 00 149 30 00 151 30 00	07 15 00 13 54 00 1 10 12 00 38 00 00 05 30 00	. 1540 3820
KONKO J MIL RAD MASS MIL RAD MASS SYLCGA A ALA	34 32 31 N 42 37 03 N 42 37 03 N 33 09 44 N	133 37 40 288 30 28 288 30 28 273 44 47	4 155 155 181	19 13 00.00 19 34 08.00 19 35 55.00 21 08 15.00	000 00 00 278 30 00 258 30 00 001 20 50	40 00 00 09 30 00 14 30 00 12 54 00	2600 2510
	•	***	13 JUN 1	958			
SHIRAZ IRAN SHIRAZ IRAN S FERNNOD SP S FERNNOO SP C CNAV F FLA	29 38 40 N 29 38 40 N 36 27 42 N 36 27 42 N 28 27 58 N		30 30	00 24 40.00 00 24 45.00 03 53 31.40 03 57 09.88 09 08 00.40	015 00 00 022 47 18 000 12 20	70 00 00	*
SYLCGA 8 ALA Marrsonbg Va C CNAV H FLA N Y C A NY ALMGOO-GS:NM	33 10 20 N 38 28 20 N 28 24 29 N 40 45 28 N 32 52 22 N	281 08 00 279 24 44 286 01 15	463 12 259	09 08 15.00 09 09 38.00 09 10 00.00 09 10 15.00 10 52 56.00	099 00 00 013 57 00 270 30 00	32 00 00 70 00 00 03 18 00 33 30 00 37 15 00	•
ALMGDO-GS,NM ALMGOO-GS,NM ALBUQ 8 NM SACMTD E CAL MIL RAD MASS		254 03 05 253 27 47 238 14 51	1339 1667 1 15	10 53 02,000 10 53 04,000 10 53 35,000 11 12 47,900 16 25 57,000	0 017 47 00 0 021 10 00 0 001 17 49	* 57 30 00 * 48 00 00	•
MIL RAO MASS MIL RAD MASS MIL RAC MASS MIL RAD MASS MIL RAO MASS	42 37 03 N 42 37 03 N 42 37 03 N	288 30 28 288 30 28 288 30 28	3 155 3 155 8 155	16 29 55.00 16 31 42.00 16 34 40.00 16 36 03.00 18 21 18.00	0 097 36 00 115 00 00 119 42 00	28 06 00 20 30 00 09 06 00 05 12 00 18 06 00	1560 2030 3075 3640 2560

STATION	LAT/TUOE		HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION * OR OECLINATION*	SLANT RANGE IN KM
			3 JUN 1958				
MIL RAO MASS	42 37 03 N	288 30 28	155 L4 JUN 1958	18 24 36 • 00	170 30 00	06 30 00	3780
EOW AF O CAL EOW AF O CAL EOW AF O CAL EOW AF O CAL EOW AF O CAL	34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	242 04 58 242 04 58 242 04 58 242 04 58 242 04 58	785 785 785 785 785 785	04 19 37.00 04 19 49.00 04 20 04.00 04 20 19.00 04 20 34.00	042 05 16 036 39 00 036 30 28 034 55 12 033 49 12	34 00 39 26 49 51 20 34 48 16 13 08 12 50 34	
EOW AF O CAL EOW AF O CAL EOW AF O CAL EOW AF O CAL	34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	242 04 58 242 04 58 242 04 58 242 04 58 242 04 58	785 785 785 785 785	04 20 44.00 04 21 04.00 04 21 14.00 04 21 34.00 04 21 49.00	033 05 20 032 28 26 032 02 31 031 42 39 031 23 42	10 15 00 08 08 52 06 22 51 04 52 48 03 32 34	
EOW AF O CAL EOW AF O CAL EOW AF O CAL EOW AF O CAL SKOKIE ILL	34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N 42 02 15 N	242 04 58 242 04 58 242 04 58 242 04 58 272 15 35	785 785 785 785	04 22 04.00 04 22 19.50 04 22 34.50 04 22 49.50 08 36 04.00	031 09 54 030 59 06 030 50 42 030 49 48 131 00 00	02 18 46 01 18 36 00 21 54 00 12 39 51 00 00	
SKOKIE ILL MEMPHIS TENN AMES A IOWA INONAPLS INO ST PL B MINN	42 02 15 N 35 09 26 N 42 01 59 N 39 40 40 N 44 58 30 N	272 15 35 270 08 46 266 22 00 273 50 38 266 45 59	85 305 223 285	08 37 40.00 09 34 26.50 09 34 40.00 09 34 53.30 09 35 08.50	043 00 00 270 00 00 023 49 00 * 270 00 00 022 57 00 *	14 00 00 76 50 00 18 42 00 # 65 30 00 32 00 00 #	
AMES A IOWA SYLCGA A ALA TERRHAUT INO CHI CPLN ILL AMES A IOWA	42 01 59 N 33 09 44 N 39 31 38 N 41 51 58 N 42 01 59 N	266 22 00 273 44 47 272 36 10 272 23 35 266 22 00	305 181 155 194 305	09 35 14.50 09 35 22.00 09 35 35.00 09 36 13.00 09 36 26.00	022 55 00 * 343 00 00 180 00 00 023 53 00 * 002 52 00 *	# 29 18 00 # 16 00 00 86 00 00 23 15 00 # 14 19 00 #	,
LANSG A MICH WHTIER A CAL WHTIER A CAL WHTIER A CAL WHTIER A CAL	42 44 00 N 33 58 40 N 33 58 40 N 33 58 40 N 33 58 40 N	275 31 00 241 56 25 241 58 25 241 58 25 241 58 25	261 149 149 149 149	09 36 56.50 11 19 10.00 1. 19 16.00 11 19 17.00 11 19 40.00	270 00 G0 060 20 00 % 001 07 00 * 001 21 00 * 003 25 00 *	82 00 00 57 36 00 4 60 18 00 4 60 46 00 4 61 00 00	
WENTCK A CAL SUWA J SUWA J	37 55 30 N 36 00 13 N 36 00 13 N	237 55 30 138 07 43 138 07 43	10 762 762	11 19 47.00 18 18 00.00 18 18 36.00	011 50 00 # 020 44 00 # 001 50 00 #	33 00 00	•
			15 JUN 19	58			
PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	02 31 49.00 03 01 58.00 03 02 06.00 03 02 12.00 03 02 25.00	092 00 00 129 06 00 124 12 00 121 42 00 113 12 00	15 24 00 11 30 00 11 48 00 11 48 00 11 42 00	
PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIDI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 02 36.00 03 02 47.00 03 02 56.00 03 03 03.00 03 03 11.00		11 30 00 11 18 00 11 00 00 10 30 00 10 00 00	
PIC MIOI FR PIC MIOI FR PIC MIDI FR WASH BEHL OC BRYN ATHN PA	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 38 49 13 N 40 08 00 N	000 08 32 000 08 32 000 08 32 282 59 31 284 56 00	2862 2862 2862 85	03 03 22.00 03 03 53.00 03 04 09.00 08 15 40.00 08 16 20.00	073 24 00 068 42 00 000 27 00	09 18 00 07 18 00 06 00 00 - 00 18 00 29 00 00	•
WASH BEHL DC N Y C A NY ST COLL P PA OOVER NJ N Y C A NY	38 49 13 N 40 45 28 N 40 44 00 N 40 57 30 N 40 45 28 N	282 59 31 286 01 15 282 06 33 285 28 15 286 01 15	259 393 267 259	08 16 21.00 08 16 32.00 08 16 33.00 08 16 35.00 08 16 39.00	0 092 00 00 0 087 00 00 0 090 00 00	* 19 00 00 32 00 00 14 00 00 28 00 00 30 30 00	*
ST COLL P PA OUNLAP ONTAR LAWTON OKLA ALBUQ B NM OK CY A OKLA	34 39 44 N 35 06 37 N	261 35 47 253 27 47	393 244 358 1667 360	08 16 40.00 08 17 00.00 10 00 28.00 10 00 32.00 10 01 09.00	002 00 00 359 00 00 003 02 00	29 48 00 # 31 00 00	•
AMRLLO A TEX WLNTCK A CAL WLNTCK A CAL STOCTN A CAL WLNTCK A CAL	37 55 30 N 37 55 30 N 37 54 17 N	237 55 30 237 55 30 238 47 36	1136 10 10 11 11	10 02 12.99 11 44 42.66 11 45 10.59 11 45 14.00 11 45 18.0	0 017 31 00 0 017 02 30 0 270 00 00	# 12 06 00 # 23 48 00 31 30 00	*
SACMTO E CAL OITA J	. 38 32 55 N 33 36 06 N			11 45 26 e8 18 43 44 e0			

* STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION#	SLANT RANGE IN KM
			15 JUN 1958	(CONT.)			
HIMEJI J MATSUE J E AMAYOT	34 50 25 N 35 27 42 N 36 42 13 N	134 41 24 133 03 18 137 11 07	25 1 65	18 43 48 • 00 18 44 03 • 00 18 44 39 • 00	311 36 D0 012 31 00 # 013 40 00 #	17 36 00 70 00 00 * 55 00 00 *	
MAORIO SP WASH BEHL OC MLWKEE A WIS S7 COLL P PA DANVILLE ILL	40 24 30 N 38 49 13 N 42 58 07 N 40 44 00 N 40 08 57 N	356 18 43 282 59 31 271 51 05 282 06 33 272 22 26	16 JUN 1958 655 294 393 189	03 27 17.00 D8 41 05.00 D8 41 21.0D D8 41 30.0D D8 41 31.6D	022 50 00 * D16 34 00 * 1D8 D0 00 273 0D D0 0077 00 00	- 13 00 00 * 22 48 00 * 12 48 00 51 00 00 15 00 00	
COLUMBUS O CAMBRDG MASS CAMBROG MASS WASH 8EHL OC CAMBROG MASS	40 01 49 N 42 22 47 N 42 22 47 N 38 49 13 N 42 22 47 N	276 57 46 288 52 14 288 52 14 282 59 31 288 52 14	229 24 24	08 41 33.D0 08 41 45.6D 08 41 53.20 08 41 56.C0 D8 42 01.6D	D01 12 3D * 263 12 00 269 00 00 D14 0D 00 * 273 18 00	32 15 00 <b>*</b> 17 30 00 18 18 00 68 00 00 <b>*</b> 19 00 00	
ST COLL P PA MLWKEE A WIS ROCHESTER NY CAMBRDG MASS OUNLAP ONTAR	40 44 00 N 42 58 07 N 43 06 49 N 42 22 47 N 43 51 46 N	282 06 33 271 51 05 282 26 11 288 52 14 280 34 40	393 294 154 24	08 42 03.0D 08 42 10.20 08 42 11.00 08 42 11.80 08 42 17.00	DOD 00 00 002 11 00 # 021 D5 00 # 284 00 00 00C 07 00 #	43 00 D0 11 20 00 * 48 0D 00 * 21 30 00 28 00 00 *	
CAMBRDG MASS WASH BERL OC CAMBRDG MASS REO BANK NJ MLWKEE A WIS	42 22 47 N 38 49 13 N 42 22 47 N 40 17 40 N 42 58 07 N	288 52 14 282 59 31 288 52 14 285 55 00 271 51 05	24 24 <b>294</b>	08 42 17 60 08 42 25 92 08 42 27 00 08 42 42 00 08 43 06 50	288 18 00 0D0 00 00 298 06 00 358 00 00 003 20 00 *	22 00 D0 16 00 00 22 30 00 18 00 00 20 22 00 #	
CAMBROG MASS CAMBROG MASS MLWKEE A WIS MLWKEE A WIS CAMBROG MASS	42 22 47 N 42 22 47 N 42 58 07 N 42 58 07 N 42 22 47 N	288 52 14 288 52 14 271 51 05 271 51 05 288 52 14	24 24 294 294 24	D8 43 11.00 08 43 13.00 08 43 23.30 08 43 47.30 08 44 D1.00	340 18 00 343 36 00 003 33 00 * 003 53 00 * 357 48 00	18 00 00 18 00 00 24 00 00 # 26 00 00 # 12 00 00	
OAYTON 8 C WLNTCK B CAL ASAHIKAWA J OTARU J	39 50 14 N 37 57 52 N 43 46 27 N 43 11 27 N	275 44 03 237 56 14 142 21 50 141 00 23	249 9 113 10	D9 24 13.0D 10 25 23.00 17 24 43.00 17 24 52.00	015 38 03 # 001 50 D0 # 000 30 00 # 090 00 00	36 42 DO # 07 00 00 # = D2 00 00 # 21 30 00	
ARMENA CO	27 50 10.11	002 42 01	17 JUN 195				
ATHENS GR ATHENS GR ATHENS GR S FERNNOO SP CAMBROG MASS	37 58 19 N 37 58 19 N 37 58 19 N 36 27 42 N 42 22 47 N	023 43 01 023 43 01 023 43 01 353 47 42 288 52 14	110 110 110 30 24	02 07 22.00 02 08 12.00 02 08 36.00 03 52 14.31 07 20 46.20	015 01 00 * 013 12 00 * 012 10 00 * 012 45 24 * 120 00 00	27 06 00 # 51 18 00 # 56 54 00 # 59 11 00 # 15 00 00	
CAMBRDG MASS CAMBROG MASS CAMBRDG MASS CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	. 24 24 24 24 24	07 20 52.20 07 20 57.00 07 20 59.00 07 21 03.60 07 21 10.50	115 54 00 111 06 00 111 48 00 106 54 00 102 42 00	15 12 00 16 36 00 15 30 00 16 36 00 16 36 00	
CAMBRDG MASS CAMBROG MASS CAMBRDG MASS CAMBRDG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	07 21 11.50 07 21 18.50 07 21 33.50 07 21 38.00 07 21 43.00	104 18 00 100 12 00 089 54 00 085 42 00 090 00 00	13 12 00 · 12 30 00 13 06 00 13 00 00	Ē.,
CAMBRDG MASS CAMBRDG MASS CAMBROG MASS CAMBRDG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	07 21 51.60 07 21 58.4D 07 22 08.60 07 22 24.8D 07 22 40.40	082 36 00 077 36 00 074 18 00 068 42 00 064 36 00	11 42 00 11 12 00 10 42 00 D9 00 00 08 18 00	
TERRHAUT INO OANVILLE ILL DANVILLE ILL INONAPLS INO LANSG A MICH	39 31 38 N 40 08 57 N 40 08 57 N 39 40 40 N 42 44 00 N	272 36 10 272 22 26 272 22 26 273 50 38 275 31 00	155 189 189 223 261	09 D5 26.00 09 D5 40.5D 09 D5 46.00 09 05 52.30 09 06 29.80	27D 00 D0 283 00 00 297 30 00 301 30 00 270 00 00	40 00 00 56 00 00 46 00 00 38 00 00 37 30 00	
OANVILLE ILL OAYTON 8 O DAYTON B O SAPPORO J OTARU J	40 08 57 N 39 50 14 N 39 50 14 N 43 04 49 N 43 11 27 N	272 22 26 275 44 03 275 44 03 141 22 13 141 00 23	249 20	09 06 31.70 09 07 18.50 09 24 13.24 17 49 14.00 17 49 16.60		36 42 00	*

STATION	LATITUOE		HE IGHT IN METERS	TIME GMT IN HR MIN SEC	OR	OR :	SL# RAN IN
		1	8 JUN 195	В			,
PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	02 32 02.00 02 32 13.00 02 32 25.00 02 32 38.00 02 32 53.00	084 54 00 079 48 00 074 42 00 069 54 00 065 12 00	14 12 00 12 54 00 11 24 00 09 54 00 08 24 00	
PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	02 33 03.00 02 33 18.00 02 33 37.00 02 33 40.00 02 33 52.00	062 12 00 058 48 00 056 48 00 054 24 00 052 48 00	07 24 00 05 54 00 04 54 00 04 12 00 03 12 00	
PIC MIOI FR PIC MIOI FR AMES A IOWA CAMBROG MASS CAMBROG MASS	42 56 12 N 42 56 12 N 42 01 59 N 42 22 47 N 42 22 47 N	000 08 32 000 08 32 266 22 00 288 52 14 288 52 14	2862 2862 305 24 24	02 34 08 00 02 34 26 00 03 30 21 050 07 45 16 020 07 45 31 060	000 00 00 048 42 00 304 00 00 221 24 00 092 06 00	50 48 00 60 54 00 35 00 00 64 30 00 81 54 00	
CAMBRDG MASS CAMBROG MASS OUNLAP ONTAR CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 43 51 46 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 280 34 40 288 52 14 288 52 14	24 24 244 24 24	07 45 33.60 07 45 35.80 07 46 13.00 07 46 37.00 07 46 43.00	078 30 00 073 24 00 002 13 00 * 012 00 00 030 00 00	86 18 00 79 12 00 15 48 00 * 60 00 00 19 00 00	
CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	07 48 12 • 00 07 48 28 • 00 07 48 36 • 00 07 48 48 • 40 07 48 53 • 00	031 48 00 031 00 00 030 30 00 031 42 00 032 18 00	05 42 00 05 00 00 04 00 00 03 00 00 02 18 00	
MANHTN M KAN WICHITA KAN ST PL B MINN ST PL 8 MINN WICHITA KAN	39 12 12 N 37 41 44 N 44 58 30 N 44 58 30 N 37 41 44 N	263 56 12 262 45 19 266 45 59 266 45 59 262 45 19	366 413 285 285 413	09 29 31.00 09 29 51.80 09 30 12.00 09 30 55.00 09 31 07.10	015 35 00 * 010 41 00 * 235 00 00 017 40 00 * 013 30 00	28 00 00 * 72 54 00 * 26 30 00 52 00 00 * 08 06 00	
LEMONT ILL WLNTCK B CAL PORTLANO ORE MITAKA J	41 41 48 N 37 57 52 N 45 29 19 N 35 40 20 N	272 00 19 237 56 14 237 22 27 139 32 30	229 9 46 50	09 31 14.00 11 14 18.00 11 15 01.00 18 13 27.50	013 30 00 * 013 25 00 * 020 48 44 * 332 42 00	47 00 00 * 60 06 00 * 06 00 00 * 05 36 00	
MEUOON FR BEXHILL ENG	48 48 18 N 50 51 00 N	002 13 52 000 30 00	19 JUN 1 162 20 JUN 1	02 56 40.60 02 57 14.00	165 59 00 116 00 00	47 18 GO 27 00 00	
MLWKEE B WIS	42 59 25 N 42 58 07 N	272 01 15 271 51 05	294 21 JUN 1	08 32 51.00 08 34 06.60	004 00 00 * 005 37 00 *	79 00 00 * 48 00 00 *	
MLWKEE A WIS MLWKEE A WIS ST PL B MINN ST PL B MINN ST PL B MINN	42 58 07 N 42 58 07 N 44 58 30 N 44 58 30 N 44 58 30 N	271 51 05 271 51 05 266 45 59 266 45 59 266 45 59	294 294 285 285 285	08 55 02.00 08 55 17.00 08 55 25.40 08 56 08.50 08 56 18.00	014 26 00 * 305 24 00 325 00 00 006 15 00 009 00 00	29 30 00 * 14 00 00 39 30 00 22 30 00 20 00 00	
ST PL B MINN	44 58 30 N	266 45 59	285	08 57 12 40	022 15 00	09 45 00	
HORSBROG ENG FARNHAM ENG HORSBROG ENG HERSTMCX ENG MEUOON FR	51 12 00 N 50 53 00 N	359 12 00 000 15 00 000 20 16	22 JUN : 32 162	02 20 25.00 02 20 37.00 02 21 09.00 02 21 16.00	000 25 00 * 077 30 00 001 56 00 *	36 30 00 09 30 00 * 22 00 00 26 30 00 * 13 43 00	
N CANTON A O ROCHESTER NY PORTLANO ORE	43 06 49 N	282 26 11	366 154 46	07 34 00.00 11 02 58.00	006 08 00 *	46 55 00 * 54 00 00 * 58 00 00 *	
MEUOON FR	48 48 10 /	002 13 52	23 JUN 162	1958 02 41 29.80	268 49 00	17 26 00 .	
MEUOON FR MEUOON FR BLFST+A.N.IF MEUOON FR	48 48 18 F 48 48 18 F	N 002 13 52 N 002 13 52 N 354 23 00	162 162	02 42 07.40 02 42 23.30 0 42 28.00	295 04 00 310 46 00 140 00 00	17 26 00 - 24 48 00 26 21 00 31 00 00 25 25 00	
BLFST-A+N+II MEUOON FR MEUOON FR	R 54 15 00   48 48 18   48 48 18	N 002 13 52	162		351 42 00	30 18 00 21 42 00 15 42 00	

STATION	1 ATTTURE	LONGITUDE	HEIGHT IN	TIME GMT	AZIMUTH OR	ELEVATION OR	SLANT
01411011	LATITUDE	EAST	METERS	HR MIN SEC	RGT ASCEN *	DECLINATION*	RANGE IN KM
CAMBRDG MASS	10.00.15		23 JUN 1958	(CONT)			
CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14	24 24 24	06 10 09.00 06 10 17.00 06 10 19.60	055 00 00 053 12 00	05 00 00 03 36 00	
			24 JUN 1958		049 42 00	03 36 00	
GELEEN NETH MIL RAD MASS	50 57 55 N 42 37 03 N	005 49 27 288 30 28	155	02 08 37.24 15 31 52.00	000 00 00 275 48 00	- 88 54 00	
MIL RAD MASS MIL RAD MASS MIL RAD MASS	42 37 03 N 42 37 03 N 42 37 03 N	288 30 28 288 30 28 288 30 28	155 155 155	15 33 00.00 15 33 57.00	241 12 00	42 54 00 49 54 00 • 46 54 00	1186 1150 1255
MIL RAD MASS MIL RAO MASS	42 37 03 N 42 37 03 N	288 30 28	155	15 34 59.00 15 36 02.00	194 12 00	38 18 00	1480
MIL RAD MASS SAPPORO J	42 37 03 N 42 37 03 N 43 04 49 N	288 30 28 288 30 28 141 22 13	155 155 20	15 37 01.00 15 38 08.00 16 57 16.00	177 36 00 173 36 00	23 42 00 18 30 00	1778 2080 2475
			25 JUN 1958	10 37 10:00	011 30 00 *	51 00 00 *	
VLARDON NETH HOUNSLOW ENG	51 54 49 N 51 19 00 N	004 18 59 359 47 00		01 38 12.60 01 38 24.00	022 21 18 *	30 18 00 *	1
CHELMSFD ENG HARROGTE ENG HOUNSLOW ENG	51 43 00 N 53 59 00 N 51 19 00 N	000 30 00 358 26 00 359 47 00		01 38 34.00 01 38 44.00	022 15 00 * 022 03 00 * 022 18 00 *	- 01 00 00 * 00 00 00 * - 09 00 00 *	
COPNON U DEN	55 41 12 N	012 34 40	14	01 39 17.00 01 41 35.00	001 10 00 *	21 30 00 *	
UNION JOHSBG	26 10 55 5	028 04 30	1806	17 45 11.00	013 10 00 *	80 00 00 - 34 12 00 *	
MIL RAO MASS	42 37 03 N	288 30 28	26 JUN 1958 155	14 10 50 00			
MIL RAD MASS MIL RAD MASS MIL RAD MASS	42 37 03 N 42 37 03 N 42 37 03 N	288 30 28 288 30 28 288 30 28	155 155 155	14 19 59:80 14 23 30:00 14 27 11:00 14 30 55:00	029 06 00 327 42 00 324 00 00 147 36 00	62 12 00 18 06 00 88 54 00 28 36 00	1663 876 1850
Carney 1 12			27 JUN 1958				
COPNGN A DEN MIL RAD MASS MIL RAD MASS MIL RAO MASS MLWKEE B WIS	55 44 41 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 59 25 N	012 33 09 288 30 28 288 30 28 288 30 28 272 01 15	155 155 155	00 34 16.00 05 45 06.00 05 46 15.00 05 48 06.00 07 31 37.00	022 13 00 * 024 36 00 029 18 00 032 18 00 009 22 00 *	~ 05 00 00 # 23 06 00 08 42 00 00 00 57 30 00 #	555 1063 1910
	75	** 6	28 JUN 1958				
BUSSUM NETH MEUDON FR BLARICM NETH BUSSUM NETH	52 16 52 N 48 48 18 N 52 16 15 N 52 16 52 N	005 09 18 002 13 52 005 14 53 005 09 18	162	00 52 21.50 00 52 32.10 00 52 44.10	020 29 00 * 051 01 00 022 35 36 *	10 54 00 * 27 13 00 30 30 00 *	•
BUSSUM NETH MEUDON FR	52 16 52 N 48 48 18 N	005 09 18		00 52 45.30 00 53 21.60	022 37 00 * 001 23 00 *	30 36 00 <b>*</b> 37 30 00 <b>*</b>	
LNDSTRT NETH COPNGN A OEN COPNGN A DEN COPNGN A DEN	52 37 39 N 55 44 41 N 55 44 41 N 55 44 41 N	002 13 52 004 44 58 012 33 09 012 33 09 012 33 09	162	00 53 23.00 00 53 43.60 00 53 45.00 00 53 57.50 00 54 10.00	044 Z1 00 002 07 42 # 020 30 00 # 021 20 00 #	13 25 00 34 10 12 * 37 00 00 * 43 30 00 *	
COPNGN 8 DEN	55 42 13 N	012 27 09	10	00 54 11.00	003 06 00 *	42 00 00 *	
			29 JUN 1958		24 00	54 48 00	
THURSO SCOT PIC MIDI FR COPNGN 8 DEN THURSO SCOT HOUNSLOW ENG	58 36 00 N 42 56 12 N 55 42 13 N 58 36 00 N 51 19 00 N	356 30 00 000 08 32 012 27 09 356 30 00 359 47 00	2862 10	01 11 20.00 01 11 54.50 01 12 07.00 01 29 26.00 01 40 49.00	135 00 00 012 18 00 269 24 00 010 14 00 # 013 40 00 #	20 00 00 54 30 00 31 06 00 00 00 00 *	536
			30 JUN 1958				
MEUDON FR	48 48 18 N 48 48 18 N	002 13 52 002 13 52	162 162	01 29 11.00 01 29 18.00	285 00 00 295 00 00	07 00 00 10 00 00	· .
COPNGN 8 DEN	55 42 12 11		1 JLY 1958				
JOKAN OB FIN AOLAID C AUS ADLAID C AUS MIL RAD MASS	55 42 13 N 60 48 50 N 34 44 00 S 34 44 00 S 42 37 03 N	012 27 09 023 30 09 138 40 00 138 40 00 288 30 28	10 103 1 <b>5</b> 5	00 01 16.80 00 03 47.00 09 54 06.00 11 38 00.00	100 04 48 170 00 00 023 55 00 # 006 45 00 #	33 04 48 53 00 00 - 67 00 00 * - 54 00 00 *	
MIL RAD MASS MIL RAO MASS	42 37 03 N	288 30 28	155	12 39 04.00	335 12 00	14 00 00	1877
MA33	42 37 03 N	288 30 28	155	12 41 00.00	338 30 00 344 06 00	22 36 00 33 42 00	1536 1255

STATION	LATITUOE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			1 JLY 1958	(CONT)			
MIL RAO MASS MIL RAD MASS MIL RAO MASS MIL RAO MASS MIL RAO MASS	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N	288 30 28 288 30 28 288 30 28 258 30 28 288 30 28	155 155 155 155 155	12 49 27.00 14 10 00.00 14 10 59.00 14 12 02.00 14 13 01.00	138 36 00 298 12 00 287 30 00 271 12 00 251 06 00	14 16 00 18 30 00 25 24 00 32 12 00 36 24 00	2736 1872 1641 1484 1446
MIL RAO MASS MIL RAD MASS MIL RAO MASS MIL RAO MASS MIL RAO MASS	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N	268 30 28 288 30 28 288 30 28 288 30 28 288 30 28	155 155 155 155 155	14 13 59.00 14 14 59.00 14 16 02.00 14 17 01.00 14 28 02.00	231 42 00 215 06 00 202 12 00 194 12 00 274 18 00	35 54 00 32 36 00 28 00 00 23 00 00 18 18 00	1499 1671 1911 2181 2061
MIL RAO MASS JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	42 37 03 N 60 48 50 N 60 48 50 N 60 48 5D N 60 48 50 N	288 30 28 023 30 09 023 30 09 023 30 09 023 30 09	155 103 103 103 103	14 29 01.00 22 34 16.70 22 34 33.00 22 34 44.50 22 34 53.10	262 48 00 136 48 00 128 42 0D 123 06 00 118 48 00	20 42 00 10 48 D0 12 54 00 13 06 00 13 06 00	1982
JOKNM OB EIN JOKNM OB EIN JOKNM OB EIN JOKNM OB EIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	D23 30 09 023 30 09 023 30 09 023 30 D9 023 30 09	103 103 103 103 103	22 35 02 • 20 22 35 18 • 50 22 35 32 • 50 22 35 44 • 30 22 35 57 • 80	114 30 00 107 12 00 101 12 00 096 48 00 092 00 00	12 54 D0 12 30 00 11 54 00 11 18 00 10 36 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 D9 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103	22 36 10.10 22 36 23.50 22 36 36.00 22 36 50.20 23 37 03.20	088 12 00 084 24 00 081 12 00 078 00 00 075 24 00	09 48 00 09 00 00 08 12 00 07 18 00 06 30 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	6D 48 50 N 6C 48 50 N 6D 48 50 N \$0 48 5D N 6D 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 37 16.70 22 37 34.70 22 37 45.20 22 37 53.20 22 38 04.20	073 06 00 070 12 00 068 48 00 067 42 D0 066 24 00	05 42 00 04 36 DD 04 06 OD 03 42 00 03 06 OD	
			2 JLY 1958	3			
COPNGN 8 DEN COPNGN A DEN MIL RAO MASS MIL RAD MASS MIL RAD MASS	55 42 13 N 55 44 41 N 42 37 03 N 42 37 03 N 42 37 03 N	D12 27 09 012 33 09 288 30 28 298 30 28 288 30 28	10 155 155 155	00 17 44.20 00 18 29.30 12 39 04.00 12 40 04.00 12 41 00.00	010 04 48 015 52 00 # 335 01 12 338 03 00 344 00 36	17 10 12 29 06 00 # 14 00 0D 22 D3 36 33 04 48	1877 1531 1255
MIL RAD MASS MIL RAD MASS MIL RAD MASS MIL RAD MASS MIL RAD MASS	42 37 03 N 42 37 03 N 42 37 D3 N 42 37 03 N 42 37 03 N	288 30 28 288 30 28 288 30 28 288 30 28 288 30 28	155 155 155 155 155	12 49 27.00 14 25 47.00 14 27 02.00 14 28 02.00 14 29 01.00	138 D3 36 297 12 00 286 30 00 274 01 48 262 04 48	14 02 24 09 18 00 14 D0 00 18 D1 48 20 04 12	2736 2473 2204 2061 1982
			3 JLY 1958	3			
CAMBR U ENG MEUOON FR MILLHILL ENG MILLHILL ENG NTN STEW ENG	52 12 51 N 48 48 18 N 51 37 00 N 51 37 00 N 54 57 00 N	000 05 41 002 13 52 359 46 00 359 46 00 355 30 00	28 162	00 33 32.80 00 33 35.10 00 33 51.00 00 33 56.00 00 34 19.00	114 30 00 324 23 00 012 26 00 • 010 38 00 • 090 00 00	44 30 00 19 46 0D 67 42 00 # 73 24 00 # 35 0D D0	
BUSSUM NETH CHELMSFD ENG COPNGN A DEN COPNGN A DEN COPNGN A DEN	52 16 52 N 51 43 DO N 55 44 41 N 55 44 41 N 55 44 41 N	D05 09 18 000 30 00 012 33 09 012 33 09 012 33 09		00 34 42 • D0 00 35 14 • C0 00 35 32 • 14 23 04 45 • 05 23 04 51 • 00	010 26 00 # 004 55 00 # 012 42 00 # 020 02 18 # 020 25 00 #	58 06 00 # 53 00 00 # 50 48 00 # 00 04 12 # 03 00 00 #	
COPNGN 8 DEN	55 42 13 N	012 27 09	10	23 05 06.70	318 48 00	37 48 DO	
MEUDON FR MEUOON FR THURSO SCOT THURSO SCOT MADRID SP	48 48 18 N 48 48 18 N 58 36 00 N 53 36 00 N 4D 24 3D N	002 13 52 002 13 52 356 3D 00 356 3D 0D 356 18 43	4 JLY 1958 162 162	00 49 15.90 00 49 34.2D 00 50 10.00 D1 09 30.0D 20 48 54.00	313 57 00 321 57 00 021 00 00 * 018 33 00 *	10 34 00 11 09 00 38 30 0D • 40 00 00 •	
MEUDON FR MEUDON FR NANCY FRANCE MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 41 54 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 006 13 30 002 13 52 002 13 52	162 162 162 162	23 19 21.70 23 19 44.0D 23 20 06.00 23 20 11.60 23 20 29.3D	039 00 00 038 47 00 022 06 D0 038 34 00 038 33 00	24 46 00 18 08 00 19 30 00 12 51 00	
COPNGN A DEN MEUDON FR	55 44 41 N 48 48 18 N	012 33 09 002 13 52	162	23 2D 29.40 23 20 49.70	018 02 00 <b>*</b> 038 31 00	10 22 00 46 00 00 * 08 04 00	

		LONGI TUOE	HEIGHT IN	TIME GMT	AZ IMUTH OR	ELEVATION GR	SLANT RANGE
STATION	LAT I TUOE	EAST	ME TERS	HR MIN SEC	RGT ASCEN *	OECLIHATION#	IN KM
			4 JLY 1958	(CONT)			
	48 48 18 N 48 48 18 N 60 48 50 N 60 48 50 N 60 48 50 N	002 13 52 002 13 52 023 30 09 023 30 09 023 30 09	162 162 103 103 103	23 21 07.90 23 21 31.70 23 23 05.40 23 23 33.00 23 23 42.60	038 29 00 038 29 00 061 00 00 063 42 00 062 12 00	06 14 C0 04 29 06 25 30 00 37 42 00 32 18 00	•
JOKNN OB FIN	60 48 50 N	023 30 09	103	23 23 53.80	061 36 00	28 48 00	
			5 JLY 1958				
AOLAIO C AUS AOLAIO C AUS LAPLAT C ARG LAPLAT C ARG COPNGN A OEN	34 44 00 S 34 44 00 S 34 54 26 S 34 54 26 S 55 44 41 N	138 40 00 138 40 00 302 05 30 302 05 30 012 33 09		09 14 00.00 11 58 30.00 23 04 53.60 23 05 38.80 23 35 21.00	020 49 00 * 008 05 00 * 003 59 42 * 001 36 26 * 307 30 00	- 59 00 00 # - 53 15 00 # - 78 42 30 # - 84 58 24 # 42 12 00	
			6 JLY 1958	3			
AOLAID C AUS AOLAIO C AUS COPNGN A OEN JOKNN OB FIN JOKNN OB FIN	34 44 00 S 34 44 00 S 55 44 41 N 60 48 50 N 60 48 50 N	138 40 00 138 40 00 012 33 09 023 30 09 023 30 09	103 103	09 29 30.00 11 13 30.00 22 03 47.20 22 04 07.20 22 04 21.10	019 46 00 * 009 15 00 * 021 47 00 * 187 12 00 181 24 00	- 59 00 00 # - 37 00 00 # 05 42 00 # 17 00 00 19 54 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 04 40.60 22 04 55.90 22 05 13.80 22 05 31.00 22 05 47.80	170 18 00 159 30 00 143 54 00 127 24 00 112 36 00	24 18 00 27 36 00 30 12 00 30 48 00 29 18 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 05 58.60 22 06 13.60 22 06 33.20 22 06 48.40 22 07 07.80	104 42 00 095 36 00 086 18 00 081 06 00 075 54 00	27 36 00 25 00 00 21 24 00 18 54 00 15 06 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 07 29.40 22 07 49.60 22 08 11.60 22 08 35.60 22 09 15.00	071 36 00 068 30 00 066 00 00 063 48 00 061 06 00	13 18 00 11 12 00 09 06 00 07 12 00 04 30 00	
JOKNN OB FIN SJUAN-GS ARG LAPLAT C ARG LAPLAT C ARG SJUAN-GS.ARG	60 48 50 N 31 30 37 S 34 54 26 S 34 54 26 S 31 30 37 S	023 30 09 291 22 46 302 05 30 302 05 30 291 22 46	103 650	22 09 45.60 23 18 41.00 23 19 35.00 23 20 21.20 23 20 24.00	059 30 00 000 47 00 * 007 36 38 * 009 05 03 * 020 53 30 *	- 68 55 00 * - 72 26 00 *	11
LAPLAT C ARG HARROGTE ENG HARROGTE ENG HARROGTE ENG COPNGN A DEN	34 54 26 S 53 59 00 N 53 59 00 N 53 59 00 N 55 44 41 N	302 05 30 358 26 00 358 26 00 358 26 00 012 33 09		23 20 31.50 23 21 34.00 23 21 47.00 23 22 19.00 23 23 41.00	009 31 18 * 019 50 00 * 020 41 00 * 022 51 00 * 012 10 00 *	08 00 00 4 16 00 00 4 29 00 00 4	
COPNGN A OEN	55 44 41 N 55 44 41 N 55 44 41 N 55 44 41 N	012 33 09 012 33 09 012 33 09 012 33 09 012 33 09		23 23 42.00 23 23 43.00 23 23 44.00 23 23 45.00 23 23 46.00	011 44 00 * 011 29 00 * 011 05 00 * 010 34 00 * 010 05 00 *	78 54 00 4 79 48 00 4 80 42 00 4	* *
COPNGN A OEN COPNGN A OEN COPNGN A OEN COPNGN A OEN ONSK-A.N.IRE	55 44 41 N 55 44 41 N 55 44 41 N 55 44 41 N 52 23 13 N			23 23 47.00 23 23 48.00 23 23 49.00 23 23 50.00 23 47 10.30	009 00 00 4 008 28 00 4 007 55 00 4	80 42 00 80 30 00 80 12 00	•
ONSK-A •N• IRE HARROGTE ENG HERSTMCX ENG HARROGTE ENG HARROGTE ENG	52 23 13 N 53 59 00 N 50 52 01 N 53 59 00 N 53 59 00 N	358 26 00 000 20 16 358 26 00	32	23 47 27.30 23 47 38.00 23 48 00.00 23 48 15.00 23 48 28.00	015 08 00 010 45 00 015 08 00	27 00 00 56 00 00	*
N SHIELD ENG COPNGN A DEN	55 01 00 N 55 44 41 N			23 49 00 50 23 49 45 00			
			7 JLY 1	958			
WOOMRA 8 AUS WOOMRA 8 AUS WOOMER AUS AOLAIO C AUS SAPPORO J	31 06 01 5 31 06 01 5 31 06 06 5 34 44 00 5 43 04 49 8	136 47 01 136 46 54 138 40 00	160 162	09 41 36.71 09 42 09.55 09 42 42.38 09 44 06.00 13 38 16.80	000 48 00 002 54 12 016 33 00	* - 78 48 00 * - 79 00 00	*

STATION	LATITUDE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	
			7 JLY 1958	(CONT)			
KASHIWABRA J KASHIWABRA J BERLN SG GER BERLN SG GER BERLN SG GER	34 30 24 N 34 30 24 N 52 28 30 N 52 28 30 N 52 28 30 N	135 48 15 135 48 15 013 20 30 013 20 30 013 20 30	66 66 50 50	13 51 14.00 13 51 35.00 21 06 11.90 22 16 23.00 22 16 33.00	345 00 00 354 00 00 066 51 08 015 46 00 *	04 30 00 03 03 00 19 01 12 28 00 00 * 35 00 00 *	
BERLN SG GER COPNGN A DEN BERLN SG GER BERLN SG GER COPNGN A OEN	52 28 30 N 55 44 41 N 52 28 30 N 52 28 30 N 55 44 41 N	013 20 30 012 33 09 013 20 30 013 20 30 012 33 09	50 50	22 16 52.00 22 16 55.00 22 16 57.00 22 16 58.00 22 17 00.00	016 15 00 # 018 40 00 # 018 21 00 # 018 30 00 # 018 55 00 #	46 00 00 * 09 00 00 * 72 00 00 * 72 00 00 * 11 00 00 *	
BERLN SG GER BERLN SG GER BERLN SG GER JOKNN OB FIN JOKNN OB FIN	52 28 30 N 52 28 30 N 52 28 30 N 60 48 50 N 60 48 50 N	013 20 30 013 20 30 013 20 30 023 30 09 023 30 09	50 50 50 103 103	22 17 06.00 22 17 25.00 22 17 32.00 22 17 45.60 22 18 00.30	021 35 00 * 001 15 00 * 001 36 00 * 214 06 00 210 42 00	76 00 00 * 65 00 00 * 61 30 00 * 19 36 00 24 06 00	
BERLN SG GER JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	52 28 30 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	013 20 30 023 30 09 023 30 09 023 30 09 023 30 09	50 103 103 103 103	22 18 07.00 22 18 20.50 22 18 35.40 22 19 01.00 22 19 23.20	039 23 30 203 24 00 194 06 00 160 48 00 117 24 00	24 12 00 32 20 00 40 06 00 53 36 00 53 18 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 19 33.10 22 19 42.50 22 19 56.60 22 20 11.30 22 20 34.80	102 12 00 092 24 00 082 54 00 076 30 00 070 24 00	48 12 00 43 48 00 37 18 00 31 24 00 24 30 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 20 52.60 22 21 15.90 22 21 44.80 22 22 08.60 22 22 49.70	067 30 00 064 48 00 062 42 00 061 30 00 060 06 00	20 30 00 16 30 00 12 42 00 10 12 00 06 48 00	
JOKNN OB FIN COPNGN A DEN COPNGN A DEN SJUAN-GS ARG SJUAN-GS ARG	60 48 50 N 55 44 41 N 55 44 41 N 31 30 37 S 31 30 37 S	023 30 09 012 33 09 012 33 09 291 22 46 291 22 46	103 650 650	22 23 17.50 23 04 45.00 23 05 40.00 23 32 13.00 23 33 13.00	059 18 0C 020 06 00 # 023 22 00 # 004 35 00 # C04 07 00 #	04 54 00 00 40 00 # 23 20 00 # - 73 18 00 # - 81 12 00 #	
HARROGTE ENG HARROGTE ENG HARROGTE ENG	53 59 00 N 53 59 00 N 53 59 00 N	358 26 0C 358 26 0C 358 26 0C	8 JLY 1956	23 57 19.50 23 57 31.50 23 57 48.50	013 30 00 * 012 45 00 * 010 35 00 *	46 00 00 * 57 00 00 * 84 30 00 *	
ONSK-A+N+IRE DNSK-A+N+IRE ONSK-A+N+IRE ONSK-A+N+IRE ONSK-A+N+IRE	52 23 13 N 52 23 13 N 52 23 13 N 52 23 13 N 52 23 13 N	353 39 43 353 39 43 353 39 43 353 39 43 353 39 43	86 86 86 86	00 00 42.40 00 00 47.40 00 00 52.40 00 01 14.40 00 01 24.40	013 49 00 * 013 44 00 * 013 38 30 * 012 54 00 * 012 14 30 *	23 48 00 * 27 24 00 * 30 54 00 * 51 00 00 *	
HARROGTE ENG ONSK-A:N:IRE HARROGTE ENG ONSK-A:N:IRE HARROGTE ENG	53 59 00 N 52 23 13 N 53 59 00 N 52 23 13 N 53 59 00 N	358 26 00 353 39 43 358 26 00 353 39 43 358 26 00	86 86	00 C1 32.50 00 01 40.40 00 01 56.50 00 02 05.40 00 02 06.50	012 40 00 # 010 16 00 # 011 40 00 # 005 48 00 # 011 00 00 #	35 00 00 * 70 06 00 * 51 00 00 * 68 42 00 *	
ONSK-A;N.IRE HERSTMCX ENG ONSK-A;N.IRE ONSK-A;N.IRE ADLAID A AUS	52 23 13 N 50 52 01 N 52 23 13 N 52 23 13 N 34 55 14 S	353 39 43 000 20 16 353 39 43 353 39 43 138 36 14	86 32 86 . 86	00 02 13.40 00 02 17.00 00 02 47.40 00 02 55.40 09 27 44.00	005 12 00 * 009 45 00 * 004 07 30 * 003 59 00 * 131 42 00	56 30 00 * 65 18 00 * 54 00 00 * 53 12 00 * 50 36 00 *	
ADLAIO A AUS AOLAIO A AUS AOLAIO A AUS WEESP NETH COPNGN A OEN	34 55 14 S 34 55 14 S 34 55 14 S 52 18 12 N 55 44 41 N	138 36 14 138 36 14 138 36 14 005 02 21 012 33 09	55 55 5 <b>5</b>	09 56 50.00 09 57 09.00 09 57 44.00 12 19 57.60 22 17 06.00	202 30 00 200 30 00 013 17 00 # 000 39 30 # 018 56 30 #	15 03 00 45 00 00 50 00 00 59 30 00 * 56 18 00 *	
COPNGN A DEN HARROGTE ENG MEUDON FR CAMBR U ENG HORSBROG ENG	55 44 41 N 53 59 00 N 48 48 18 N 52 12 51 N 50 53 00 N	012 33 09 358 26 00 002 13 52 000 05 41 000 15 00	162 28	22 17 15.00 22 28 00.15 22 28 27.60 22 28 31.40 22 28 41.00	020 05 00 # 133 54 00 351 41 00 146 54 00 049 06 00	10 36 00 # 20 18 00 * 27 18 00 62 20 00 60 24 00 07 18 00	
HORSBROG ENG MEUOON FR HARROGTE ENG MEUDON FR HARROGTE ENG	50 53 00 N 48 48 18 N 53 59 00 N 48 48 18 N 53 59 00 N	000 15 00 002 13 52 358 26 00 002 13 52 358 26 00	162 162	22 28 42.00 22 28 45.80 22 28 46.50 22 29 10.10 22 29 17.50	020 40 00 * 016 17 00 020 07 00 * 026 01 00 021 36 00 *	35 00 00 * 45 18 00 00 30 00 * 29 53 00 12 00 00 *	

		LONGITUDE	HEIGHT IN	TIME GMT	AZIMUTH	ELTVATION	SLA
STATION	LATITUOE	EAST	METERS	HR MIN SEC	OR RGT ASCEN #	OR DECLINATION*	RAN IN
			8 JLY 1958	(CONT)			
MEUDON FR MEUDON FR MEUOON FR CAMBR U ENG CAMBR U ENG	48 48 18 N 48 48 18 N 48 48 18 N 52 12 51 N 52 12 51 N	002 13 52 002 13 52 002 13 52 000 05 41 900 05 41	162 162 162 28 28	22 29 29.00 22 29 45.00 22 30 00.90 22 30 22.80	029 31 00 031 17 00 032 32 00 056 42 00	22 33 00 18 22 00 15 14 00 15 48 00	
HERSTMCX ENG LAPLAT C ARG LAPLAT C ARG SJUAN-GS ARG LAPLAT C ARG	50 52 01 N 34 54 26 S 34 54 26 S 31 30 37 S 34 54 26 S	000 20 16 302 05 30 302 05 30 291 22 46 302 05 30	32 650	22 31 33.70 22 45 09.00 23 45 44.60 23 46 11.50 23 47 00.00	049 06 00 075 00 00 008 21 33 * 008 37 56 * 008 39 00 *	07 18 00 62 00 00 38 05 36 * 36 28 48 * 69 06 00 *	
SJUAN-GS ARG LAPLAT C ARG	31 30 37 S 34 54 26 S	291 22 46 302 05 30	650	23 47 02.70 23 47 17.00 23 47 49.90	009 12 24 * 009 13 00 * 009 46 34 *	- 32 15 18 * - 69 30 00 * - 26 11 12 *	
			9 JLY 1958		-	20 11 12 1	
HARROGTE ENG HARROGTE ENG CHRCHL B CAN CHRCHL B CAN AOLAIO C AUS	53 59 00 N 53 59 00 N 57 56 12 N 57 56 12 N 34 44 00 S	358 26 00 358 26 00 265 49 33 265 49 33 138 40 00		00 15 13.00 00 15 40.00 05 25 11.10 07 12 49.50 08 24 46.00	011 06 00 # 009 54 00 # 180 00 00 000 00 00 019 02 00 #	45 00 00 * 53 30 00 * 50 00 00 33 00 00 * 41 45 00 *	
AOLAIO A AUS WOOMER AUS WOOMER AUS PERTH AUS CPTWN A S AF	34 55 14 S 31 06 06 S 31 06 06 S 32 00 07 S 33 56 00 S	138 36 14 136 46 54 136 46 54 115 51 10 018 28 37	55 162 162 5 7	09 11 14.00 10 08 09.20 10 08 41.85 10 10 55.30 17 01 46.00	292 30 00 007 13 00 * 007 39 18 * 106 00 00 180 00 00	55 00 00 58 54 00 * 59 56 00 * 15 24 00 30 00 00	
PRET B S AF CPTWN A S AF UNION JOHSBG PRET B S AF UNION JOHSBG	25 43 43 S 33 56 00 S 26 10 55 S 25 43 43 S 26 10 55 S	028 12 42 018 28 37 028 04 30 028 12 42 028 04 30	1311 7 1806 1311 1806	17 04 34.50 17 05 08.10 17 06 16.40 17 06 22.00 17 06 41.00	006 00 00 * 017 54 00 * 016 00 00 * 016 07 00 * 016 32 00 *	- 79 42 00 # - 37 18 00 # - 78 06 00 # - 78 30 00 # - 69 36 00 #	
JOHBG E S AF CPTWN A S AF JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	26 08 00 S 33 56 00 S 60 48 50 N 60 48 50 N 60 48 50 N	028 01 00 018 28 37 023 30 09 023 30 09 023 30 09	1672 7 103 103 103	17 06 47.00 17 38 23.00 20 58 34.80 20 58 45.50 20 58 57.00	016 34 00 * 000 00 00 141 48 00 135 12 00 127 54 00	- 68 00 00 * 47 30 00 18 54 00 19 30 00 19 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	20 59 16.60 20 59 31.50 20 59 47.60 21 00 05.80 21 00 24.00	115 48 00 107 24 00 099 30 00 091 54 00 085 30 00	19 36 00 18 48 00 17 30 00 15 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 00 41.00 21 00 57.60 21 01 19.50 21 01 41.90 21 02 17.30	080 48 00 076 54 00 072 48 00 069 18 00 065 06 00	14 00 00 12 24 00 11 00 00 09 12 00 07 30 00	
JOKNN OB FIN LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	60 48 50 N 34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S	023 30 09 302 05 30 302 05 30 302 05 30 302 05 30	103	21 02 40.60 22 10 24.60 22 10 32.90 22 11 45.80 22 14 07.90	062 54 00 000 14 32 * 004 15 58 * 004 13 50 * 018 23 35 *	05 06 00 03 42 00 = 62 35 00 + = 63 19 06 + = 70 32 06 +	
LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S	302 05 30 302 05 30 302 05 30 302 05 30 302 05 30		22 14 18 80 22 15 16 00 22 15 38 00 22 16 14 00 22 16 38 20	017 50 40 * 017 10 46 * 017 12 34 * 017 11 01 * 017 11 24 *	- 84 13 54 * - 81 27 06 * - 62 04 00 * - 53 53 42 * - 38 14 48 *	
LAPLAT C ARG LAPLAT C ARG PIC MIOI FR HERSTMCX ENG HOUNSLOW ENG	34 54 26 S 34 54 26 S 42 56 12 N 50 52 01 N 51 19 00 N	302 05 30 302 05 30 000 08 32 000 20 16 359 47 00	2862 32	22 17 11.80 22 18 20.10 22 40 20.00 22 40 24.50 22 40 24.80	017 13 11 * 017 17 13 * 338 36 00 013 57 00 * 014 35 00 *	- 27 44 54 * - 14 30 06 * 05 59 36 * 12 12 00 19 00 00 *	
MEUDON FR PIC MIDI FR MEUDON FR CAMBR U ENG PIC MIOI FR	48 48 18 N 42 56 12 N 48 48 18 N 52 12 51 N 42 56 12 N	002 13 52 000 08 32 . 002 13 52 000 05 41 000 08 32	162 2862 162 28 2862	22 40 24.90 22 40 31.00 22 40 41.00 22 40 45.10 22 40 45.50	289 54 00 343 30 00 303 35 00 243 24 00 349 00 00	15 00 00 *  23 57 00 11 18 00 26 20 00 45 12 00	×
MILLHILL ENG BATTERSE ENG PIC MIOI FR MILLHILL ENG HERSTMCX ENG	51 37 00 N 51 28 00 N 42 56 12 N 51 37 00 N 50 52 01 N	359 46 00 359 51 00 000 08 32 359 46 00 000 20 16	2862	22 40 46 00 22 40 48 60 22 40 51 30 22 40 54 50 22 40 58 50	014 41 00 * 014 33 00 * 351 42 00 014 45 00 *	10 12 00 23 30 00 * 38 48 00 * 09 36 00 33 48 00 *	
MEUDON FR	48 48 18 N	002 13 52	162	22 40 58.50	013 23 00 <b>*</b> 320 11 00	55 00 00 <b>+</b> 27 33 00	

		LONGITUDE	HEIGHT	TIME GMT	AZIMUTH	ELEVATION
STATION	LATITUDE	EAST	METERS	HR MIH SEC	OR RGT ASCEN *	OR DECLINATION*
			9 JLY 1958	(CONT)		
MILLHILL ENG PIC MIDI FR HOUNSLOW ENG MILLHILL ENG MEUOON FR	51 37 00 N 42 56 12 N 51 19 00 N 51 37 00 N 40 48 18 N	359 46 00 000 08 32 359 47 00 359 66 00 002 13 52	2862	22 41 03:00 22 41 09:00 22 41 10:20 22 41 11:50 22 41 15:30	014 51 00 # 357 12 00 011 50 00 # 014 58 00 # 333 56 00	44 48 00 # 08 36 00 54 00 00 # 56 54 00 # 26 30 00
PIC MIDI FR MILLHILL ENG PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 51 37 00 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 359 46 00 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862	22 41 18 • 50 22 41 20 • 00 22 41 26 • 90 22 41 35 • 50 22 41 41 • 50	000 00 00 015 17 00 * 002 24 00 004 30 00 006 30 00	07 54 00 69 24 00 * 07 30 00 06 54 00 06 18 00
MEUOON FR PIC MIOI FR PIC MIDI FR PIC MIOI FR MEUOON FR	48 48 18 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 48 40 18 N	002 13 52 000 05 32 000 08 32 000 08 32 902 13 52	162 2862 2862 2862 162	22 41 46.30 22 41 53.50 22 42 02.50 22 42 11.00 22 42 11.50	356 14 00 008 30 00 010 06 00 011 18 00 007 09 00	21 16 00 05 48 00 05 18 00 04 48 00 16 54 00
HERSTMCX ENG JOKAN OB FIN JOKAN OB FIN JOKAN OB FIN JOKAN OB FIN	50 52 01 N 60 48 50 N 60 40 50 N 60 46 50 N 60 48 50 N	000 20 16 023 30 09 023 30 09 023 30 09 023 30 09	32 103 103 103 103	22 42 26 40 0 22 46 03 42 0 22 46 13 46 0 22 46 26 42 0 22 46 51 46 0	002 59 00 * 042 18 00 045 24 00 048 12 00 050 00 00	54 00 00 <b>*</b> 36 18 00 32 48 00 28 36 00 22 36 00
JOKNN OB FIN HARROGTE ENG	60 48 50 N 53 59 00 N	023 30 09 358 26 00	103	22 47 22.60 23 21 15.00	054 54 00 004 50 00 #	17 13 00
			10 JLY 1958		004 90 00 ¥	79 00 00 *
LAPLAT C ARG LAPLAT C ARG PERTH AUS PERTH AUS PRET B S AF	34 54 26 S 34 54 26 S 32 00 07 S 32 00 07 S 25 43 43 S	302 05 30 302 05 30 115 51 10 115 51 10 028 12 42	5 5 1311	00 01 35 60 00 01 57 60 10 21 33 650 12 08 39 80 16 26 24 00	010 18 02 * 010 40 15 * 133 12 00 295 00 00 010 49 00 *	- 00 24 06 * 03 50 35 * 30 48 00 19 30 00 - 01 42 00 *
PRET RD S AF CPTWN A S AF UNION JOHSBG JOH8G C S AF JOHBG C S AF	25 47 18 5 33 56 90 S 25 10 55 S 26 07 90 S 25 07 90 S	028 13 43 018 28 37 023 04 30 028 00 00 028-00 00	1542 7 1806 1615 1615	16 26 34a20 17 15 45.00 17 16 34.00 17 18 68.50 17 18 43.00	011 02 00 * 180 00 00 009 13 00 * 010 07 00 * 011 12 00 *	03 00 00 # 48 30 00 60 30 00 # 58 48 00 # 53 30 00 #
UNION JOHSEG UNION JOHSEG PRET B S AF UNION JOHSEG JOHEG C S AF	25 10 55 S 26 10 55 S 25 43 43 S 25 10 55 S 26 07 00 S	028 04 30 028 04 30 028 12 42 028 04 30 028 00 00	1806 1806 1311 1806 1615	17 19 69.60 17 19 10.85 17 19 12.00 17 19 53.50 17 19 55.50	012 01 00 # 012 03 00 # 011 52 00 # 013 13 30 # 013 19 00 #	- 44 48 00 * - 44 24 00 * - 45 48 00 * - 23 00 00 * - 23 00 00 *
PRET B S AF UNION JOHSBG PRET B S AF PRET B S AF UNION JOHSBG	25 43 43 \$ 26 10 55 5 25 43 43 \$ 26 10 55 \$	028 12 42 028 04 30 028 12 42 028 12 42 028 04 30	1311 1805 1311 1311 1805	17 20 00.00 17 20 09.60 17 20 18.00 17 20 54.00 17 30 49.40	013 18 00 * 013 36 00 * 013 42 00 * 014 27 00 * 010 35 06 *	- 23 12 00 * - 12 36 00 * - 12 00 00 * - 12 00 00 * - 09 42 00 * - 13 07 00 *
BERLN SG GER BERLN SG GER JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	52 28 30 N 52 28 30 N 60 40 50 N 60 48 50 N 60 48 50 N	013 20 30 013 20 30 023 30 09 023 30 09 023 30 09	50 50 103 103	21 UR 18.50 21 08 39.50 21 09 42.30 21 10 00.90 21 10 13.30	019 33 30 * 021 07 00 * 184 42 00 175 24 00 167 06 00	14 00 00 * 26 30 00 * 20 36 00 25 00 00 28 06 00
JOKNN 09 FIN JOKNN 08 FIN JOKNN 08 FIN JOKNN 08 FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 H	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 10 34.30 21 10 48.00 21 11 04.50 21 11 13.50 21 11 32.60	148 40 00 135 12 00 119 12 00 111 18 00 097 36 00	32 18 00 33 18 00 32 30 00 31 30 00 27 42 00
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 40 50 N 60 48 50 N	023 30 09 023 20 09 023 30 09 023 30 09 023 30 09	103 103 103 103	21 11 47.80 21 12 05.00 21 12 20.60 21 12 39.20 21 13 01.70	089 42 00 082 48 00 078 06 00 073 42 00 069 48 00	24 42 00 21 24 00 18 42 00 16 00 00 13 12 00
JOKNN OB FIN JOKNN CB FIN JOKNN OB FIN JOKNN OB FIN COPNON B OEN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 55 42 13 N	023 30 09 023 30 09 023 30 09 023 30 09 012 27 09	103 103 103 103	21 13 30:00 21 14 10:30 21 14 30:90 21 14 52:50 21 44 10:00	066 18 00 062 48 00 061 30 00 060 00 00 201 48 00	10 12 00 07 06 00 05 30 00 03 48 00 33 24 00
HOUNSLOW ENG COPNGN 8 DEN HORSBROG ENG 8 ONN B GER LAPLAT C ARG	51 19 00 N 55 42 13 N 50 53 00 N 50 43 45 N 34 54 26 S	359 47 00 012 27 09 000 15 00 007 05 47 302 05 30	10 62	22 07 37:00 22 07 40:50 22 07 42:00 22 08 43:87 22 26 20:00	019 20 00 <b>*</b> 351 36 00 121 00 00 089 15 00 010 13 27 <b>*</b>	12 00 00 <b>*</b> 14 24 00 54 00 00 86 00 00 <b>-</b> 69 59 06 <b>*</b>
LAPLAT C ARG	34 54 26 S	302 05 30		22 26 48 430	011 43 20 *	- 66 29 00 *

SLANT RANGE IN KM

	STATION		LONGITUOE	HE I GHT	TIME GMY	A7720.***		
		LATITUOE	EAST	IN METERS	IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT
				10 11 7 105	9 (40)		OCCEINATION*	IN K
	LAPLAT C ARG LAPLAT C ARG PIC MIDI FR PIC MIDI FR PIC MIDI FR	34 54 26 S 34 54 26 S 42 56 12 N 42 56 12 N 42 56 12 N	302 05 30 302 05 30 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862	22 26 59.90 22 27 48.30 22 51 37.50 22 51 54.50 22 52 10.00	012 16 23 # 013 57 53 # 315 42 00 322 12 00 327 48 00	- 63 47 24 # - 45 04 54 # 06 12 00 06 24 00	
	PIC MIDI FR HORSBRDG ENG MEUDON FR BEXHILL ENG BUSSUM NETH	42 56 12 N 50 53 00 N 48 48 18 N 50 51 00 N 52 16 52 N	000 08 32 000 15 00 002 13 52 000 30 00 005 09 18	2862 162	22 52 25.50 22 52 28.00 22 52 55.30 22 53 00.00 22 53 01.40	333 30 00 290 00 00 318 43 00 011 00 00 *	06 30 00 06 18 00 27 00 00 15 31 00 44 00 00 *	
	HORSBRDG ENG MEUOON FR PIC MIOI FR MILLHILL ENG BILTHVN NETH	50 53 00 N 48 48 18 N 42 56 12 N 51 37 00 N 52 08 27 N	000 15 00 002 13 52 000 08 32 359 46 00 005 12 46	162 2862	22 53 08 00 22 53 09 80 22 53 23 50 22 53 24 00 22 53 26 10	321 00 00 326 29 00 351 30 00 009 34 00 * 011 24 30 *	26 18 00 # 28 00 00 15 33 00 04 42 00 60 54 00 #	
	PIC MIO1 FR MILLHILL ENG BILTHVN NETH MEUDON FR BUSSUM NETH	42 56 12 N 51 37 00 N 52 08 27 N 48 48 18 N 52 16 52 N	000 08 32 359 46 00 005 12 46 002 13 52 005 09 18	2862	22 53 28 • 00 22 53 33 • 00 22 53 34 • 10 22 53 34 • 60 22 53 40 • 90	352 48 00 008 42 00 * 011 06 42 * 339 37 00 010 53 18 *	37 12 00 # 04 30 00 63 18 00 # 40 54 00 # 15 02 00	
	MILLHILL ENG PIC MIDI FR PIC MIOI FR PIC MIDI FR BUSSUM NETH	51 37 00 N 42 56 12 N 42 56 12 N 42 56 12 N 52 16 52 N	359 46 00 000 08 32 000 08 32 000 08 32 005 09 18	2862 2862 2862	22 53 41.00 22 53 42.50 22 53 58.00 22 54 06.50 22 54 12.10	007 38 00 # 356 12 00 359 42 00 001 36 00 009 15 18 #	43 30 00 # 64 12 00 # 04 00 00 03 30 00 03 06 00	
1	PIC MIOI FR SNEEK NETH MEUDON FR MEUDON FR PIC MIOI FR	42 56 12 N 53 02 25 N 48 48 18 N 48 48 18 N 42 56 12 N	000 08 32 005 39 52 002 13 52 002 13 52 000 08 32	2862 162 162 2862	22 54 15.50 22 54 15.90 22 54 15.90 22 54 32.80 22 54 33.50	003 30 00 009 37 48 # 356 57 00 002 40 00 006 24 00	02 48 00 55 00 00 # 12 43 00 11 17 00	
F .	COPNGN A DEN PIC MIOI FR PIC MIOI FR BUSSUM NETH PIC MIOI FR	55 44 41 N 42 56 12 N 42 56 12 N 52 16 52 N 42 56 12 N	012 33 09 000 08 32 000 08 32 005 09 18 000 08 32	2862 2862 2862	22 54 35.04 22 54 50.00 22 54 59.00 22 55 06.90 22 55 07.00	012 07 00 # 009 30 00 010 48 00 005 57 48 # 011 54 00	02 00 00 36 24 00 # 01 18 00 00 54 00 54 42 00 #	
,	PIC MIOI FR STEENWK NETH PIC MIOI FR JOKNN OB FIN JOKNN OB FIN	42 56 12 N 52 47 29 N 42 56 12 N 60 48 50 N 60 48 50 N	000 08 32 006 06 38 000 08 32 023 30 09 023 30 09	2862 2862 103 103	22 55 15.50 22 55 17.40 22 55 24.50 22 55 47.20 22 55 56.90	013 12 00 005 56 00 # 016 12 00 278 12 00 281 18 00	00 36 00 00 18 00 55 12 00 # 00 18 00 . 23 18 00	
	JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 56 06.30 22 56 19.90 22 56 29.90 22 56 38.30 22 56 48.50	285 00 00 292 06 00 298 36 00 306 24 00 321 24 00	26 06 00 29 00 00 34 06 00 37 48 00 41 18 00 46 00 00	
	JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN COPNGN B OEN	60 48 50 N 60 48 50 N 60 48 50 N 55 42 13 N	023 30 09 023 30 09 023 30 09 012 27 09	103 103 103 10	22 57 52.70 22 58 17.10 22 58 43.30 23 54 54.80	026 30 00 038 42 00 046 30 00 131 36 00	38 54 00 31 36 00 25 30 00 25 30 00	
	PORTLAND ORE	45 29 19 N	227 22 27	11 JLY 1958				
k k	WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	237 22 27 136 47 07 136 47 07 136 47 07 136 47 07	46 162 162 162 162	05 45 43.00 08 47 58.63 08 48 11.97 08 48 26.94 08 48 40.82	023 35 15 * 160 42 54 157 05 45 152 48 07 148 24 36	46 15 00 # 26 51 00 27 54 00 28 55 12	
W	NOOMER AUS NOOMER AUS NOOMER AUS NOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	08 48 51.82 08 49 08.72 08 49 19.72 08 49 33.03 08 49 47.37	143 56 06 138 29 42 134 28 30 129 06 54	29 48 43 30 29 24 30 59 42 31 13 30 31 19 48	
W	VOOMER AUS VOOMER AUS VOOMER AUS VOOMER AUS VOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162	08 49 56.47 08 50 14.09 08 50 26.86 08 50 39.86 08 50 50.53	123 27 36 119 45 18 112 48 36 107 52 48 103 07 30	31 05 42 30 48 54 29 52 48 28 57 00 27 49 12	
WW	OOMER AUS OOMER AUS OOMER AUS OOMER AUS OOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162	08 50 58.76 08 51 09.63 08 51 19.89 08 51 26.56 08 51 33.97	099 21 18 096 34 48 093 11 42 089 57 36 088 04 40 086 06 36	24 42 44	

STATION		LATITUDE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
				11 JLY 1958	(CONT)			
WOOMER	AUS AUS AUS AUS	31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	08 51 41.45 08 51 50.82 08 52 00.69 08 52 07.42 08 52 17.17	084 08 24 081 54 07 079 32 24 078 06 57 076 08 06	20 49 12 19 42 36 18 28 12 17 40 48 16 31 30	
WOOMER WOOMER WOOMER WOOMER WOOMER	AUS AUS AUS AUS AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	08 52 25.42 08 52 33.49 08 52 41.75 08 52 52.34 08 52 59.81	074 31 19 073 00 00 071 34 15 069 50 31 068 41 24	15 34 12 14 37 12 13 42 46 12 33 00 11 45 07	•
WOOMER WOOMER WOOMER WOOMER WOOMER	AUS AUS AUS AUS AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	08 53 07.73 08 53 15.05 08 53 29.52 08 53 33.32 03 53 41.41	067 32 03 066 30 54 065 07 55 054 11 06 063 12 36	10 55 12 10 09 54 09 09 54 08 24 07 07 39 28	
WOOMER WOOMER WOOMER WOOMER WOOMER	AUS AUS AUS AUS AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	08 53 48.47 08 54 01.39 08 54 13.66 08 54 23.16 08 54 30.81	062 25 30 061 01 12 059 46 48 058 56 24 058 13 12	07 00 00 05 52 30 04 51 28 04 03 36 03 26 24	
WOOMER WOOMER UNION JO PRET B CPTWN A	S AF	31 06 06 S 31 06 06 S 26 10 55 S 25 43 43 S 33 56 00 S	136 46 54 136 46 54 028 04 30 028 12 42 018 28 37	162 162 1806 1311 7	10 35 17.60 10 36 07.01 17 30 49.40 17 30 56.40 17 31 03.00	010 03 30 * 010 38 00 * 010 35 06 * 010 36 00 * 014 52 00 *	- 05 10 00 # 06 55 00 # - 13 07 00 # - 13 18 00 # 30 14 00 #	
UNION JO OLFSFIN PRET B JOHBG C UNION JO	S AF S AF S AF	26 10 55 S 25 57 33 S 25 43 43 S 26 07 00 S 26 10 55 S	028 04 30 028 14 53 028 12 42 028 00 00 028 04 30	1806 1544 1311 1615 1806	17 31 30.80 17 31 39.68 17 31 59.60 17 32 04.00 17 32 05.50	011 13 00 * 010 28 18 * 011 32 30 * 011 43 00 * 011 40 00 *	02 30 00 * - 12 58 00 * 11 12 00 * 15 30 00 * 16 00 00 *	
OLFSFTN JOHBG C OLFSFTN UNION JO MEUOON I	S AF S AF DHSBG	25 57 33 S 26 07 00 S 25 57 33 S 26 10 55 S 48 48 18 N	028 14 53 028 00 00 028 14 53 028 04 30 002 13 52	1544 1615 1544 1806 162	17 32 20:21 17 33 18:00 17 34 10:12 17 42 28:00 21 17 20:60	011 04 06 * 012 48 00 * 012 41 24 * 010 23 00 * 169 49 00	02 06 00 # 39 30 00 # 40 23 00 # 10 30 00 # 25 51 00	
MEUDON MEUDON MEUOON CAMBR U MEUDON	FR FR Eng	48 48 18 N 48 48 18 N 48 48 18 N 52 12 51 N 48 48 18 N	002 13 52 002 13 52 002 13 52 000 05 41 002 13 52	162 162 162 28 162	21 17 34.10 21 17 47.50 21 18 02.40 21 18 26.50 21 18 30.80	158 39 00 143 23 00 121 44 00 126 48 00 087 26 00	30 14 00 34 41 00 36 48 00 18 12 00 31 28 00	
MEUOON BERLN S MEUDON CAMBR U BERLN S	G GER FR ENG	48 48 18 N 52 28 30 N 48 48 18 N 52 12 51 N 52 28 30 N	002 13 52 013 20 30 002 13 52 000 05 41 013 20 30	162 50 162 28 50	21 18 46.40 21 19 01.00 21 19 04.00 21 19 21.40 21 19 22.60	075 12 00 233 33 00 066 13 00 091 54 00 015 C2 30 *	26 32 00 34 12 00 21 37 00 16 06 00 27 00 00	1
MEUOON BERLN S BERLN S HANOVR HANOVR	G GER G GER B GER	48 48 18 N 52 28 30 N 52 28 30 N 52 22 10 N 52 18 20 N	002 13 52 013 20 30 013 20 30 009 45 11 009 35 42	162 50 50	21 19 27.20 21 19 28.00 21 19 39.60 21 19 41.90 21 19 42.00	058 37 00 015 10 00 * 013 51 30 020 39 57 * 020 25 00 *		
MEUDON MEUDON BERLN : MEUOON MEUOON	FR SG GER FR	48 48 18 N 48 48 18 N 52 28 30 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 013 20 30 002 13 52 002 13 52	162 162 50 162 162	21 19 42.10 21 19 55.70 21 20 00.60 21 20 11.60 21 20 27.90	055 18 00 052 56 00 019 34 00 # 050 46 00 049 03 00	14 03 00 12 05 00 74 42 00 10 05 00 08 24 00	
BERLN MEUDON BERLN BERLN JOKNN	FR SG GER SG GER	52 28 30 N 48 48 18 N 52 28 30 N 52 28 30 N 60 48 50 N	013 20 30 002 13 52 013 20 30 013 20 30 023 30 09	50 162 50 50 103	21 20 31.70 21 20 55.80 21 21 03.70 21 21 42.70 21 22 57.60	256 15 30 046 44 00 151 21 30 249 15 30 082 42 00	38 06 00 06 08 00 24 36 00 15 42 00 38 35 00	
JOKNN JOKNN JOKNN	09 FIN 09 FIN 0B FIN 08 FIN 0B FIN	50 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103 103 103 103	21 23 27.60 21 23 36.40 21 23 45.80 21 23 56.80 21 24 07.00	070 12 00 068 36 00 067 <b>0</b> 0 00	27 24 00 25 12 00 22 48 00 20 30 00 18 42 00	
JOKNN JOKNN	OB FIN OB FIN OB FIN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 10 09 023 30 09 023 30 09	103 103 103	21 24 21.80 21 24 34.40 21 24 46.40 21 24 54.00 21 25 15.80	063 30 00 062 42 00 062 12 00	16 24 00 14 36 00 13 06 00 12 12 00 10 00 00	· •

STATION	LATITU0E	LONG I TUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION®	SLANT RANGE IN KM
		V . 0	11 JLY 1958	(CONT) -			
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103	21 25 35.00 21 25 48.40 21 26 08.40 21 26 26.80 21 26 40.60	060 30 00 060 06 00 059 36 00 059 12 00 058 54 00	08 24 00 07 24 00 05 54 00 04 36 00 03 48 00	
SCHNTDY A NY COPNGN 8 DEN HOUNSLOW ENG CHELMSFO ENG ORFONESS ENG	42 53 32 N 55 42 13 N 51 19 00 N 51 43 00 N 52 06 00 N	285 58 57 012 27 09 359 47 00 000 30 00 001 36 00	235 10	21 27 58.00 22 20 10.10 22 42 53.00 22 42 58.00 22 43 28.00	012 13 00 # 328 00 00 010 58 00 # 011 05 00 # 338 54 00	57 15 00 # 46 00 00 59 00 00 # 57 00 00 # 32 18 00	. 1
ORFONESS ENG ORFONESS ENG MILLHILL ENG JOKNN OB FIN JOKNN OB FIN	52 06 00 N 52 06 00 N 51 37 00 N 60 48 50 N 60 48 50 N	001 36 00 001 36 00 359 46 00 023 30 09 023 30 09	103 103	22 43 32.00 22 43 42.00 22 43 50.00 23 07 29.40 23 07 47.70	342 30 00 351 06 00 004 55 00 * 294 12 00 302 12 00	31 42 00 29 48 00 67 00 00 * 25 00 00 29 42 00	
			12 JLY 1958				Ξ.
OUNLAP ONTAR OUEBEC CAN OUEBEC CAN OUEBEC CAN ALBUO A NM	43 51 46 N 46 53 03 N 46 53 03 N 46 53 03 N 35 05 03 N	280 34 40 288 31 06 288 31 06 288 31 06 253 21 24	244	02 28 07.00 02 28 30.20 02 29 06.20 02 29 55.20 02 53 23.00	021 28 48 * 014 07 00 * 014 52 00 * 001 42 00 * 018 59 00 *	38 42 00 # 19 08 00 # 74 12 00 # 62 19 00 # - 05 18 00 #	
WICHITA KAN AMES A IOWA PORTLAND ORE WOOMER AUS WOOMER AUS	37 41 44 N 42 01 59 N 45 29 19 N 31 06 07 S 31 06 07 S	262 45 19 266 22 00 237 22 27 136 47 07 136 47 07	413 305 46 162 162	03 58 51 e80 04 12 33 e00 05 55 13 e06 08 58 05 e31 08 58 34 e85	000 40 00 * 053 30 00 011 00 00 * 010 30 43 007 06 03	56 18 00 # 16 24 00 61 00 00 # 24 45 00 28 47 06	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 01 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 01 136 47 07 136 47 07	162 162 160 162 162	08 58 50.44 08 59 12.70 08 59 24.00 08 59 24.53 08 59 33.68	004 48 1e 000 43 15 180 00 00 178 05 27 175 39 00	31 07 48 34 53 16 36 00 00 37 03 28 38 50 24	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	C8 59 33.68 C8 59 50.27 C8 59 57.42 C9 C0 13.11 C9 C0 23.47	017 53 90 170 27 36 167 47 06 160 17 24 155 26 06	38 50 24 42 16 12 43 46 30 47 16 12 49 06 39	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 06 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 46 54 136 47 07 136 47 07 136 47 07	162 162 162 162 162	09 00 30.17 09 00 32.50 09 00 35.71 09 00 51.98 09 00 55.32	150 57 00 016 01 00 * 147 10 30 134 43 48 132 09 54	50 25 12 = 59 33 00 # 51 21 03 53 23 16 53 36 36	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 06 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 46 54 136 47 07 136 47 07 136 47 07	162 162 162 162 162	09 01 12.48 09 01 21.79 09 01 26.57 09 01 33.73 09 01 44.84	117 03 18 016 18 36 * 104 41 06 098 54 28 090 43 30	53 48 00 = 34 54 00 * 52 27 54 51 18 46 49 01 48	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 06 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 46 54 136 47 07	162 162 162 162 162	09 01 52.39 09 01 58.31 09 02 11.04 09 02 11.09 09 02 23.11	085 45 28 081 40 12 075 18 07 016 29 36 * 070 29 24	45 25 55 42 16 12	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	09 02 45.52 09 02 55.66 09 03 02.40 09 03 08.66 09 03 19.92	063 03 28 060 21 36 060 21 36 057 25 08 055 16 30	32 55 30 30 26 24 28 45 36 27 24 36 24 58 48	. 15
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S	136 47 07 136 47 07 136 46 54 136 47 07 136 47 07	162 162 162	09 03 26.13 09 03 32.84 09 03 33.10 09 03 43.43 09 03 57.37	054 09 46 053 04 12 016 45 42 9 051 33 54 049 48 36	23 40 22 22 25 48 16 44 00 20 24 00 18 02 06	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162	09 04 06:13 09 04 11:65 09 04 18:81 09 04 27:17 09 04 38:46	048 46 30 048 15 36 047 29 24 046 43 30 045 47 06	16 36 39 15 45 00 14 39 36 13 31 48 12 01 30	
WOOMER AUS WOOMER AUS	31 06 07 S	136 47 07 136 47 07 136 47 07	7 162	09 04 46.61 09 05 01.42 09 05 11.50	045 07 12 044 05 24 043 25 48	11 00 36 09 16 04 08 07 48	

STATION	LATITUDE		HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION SI OR R DECLINATION* I
		1	2 JLY 1958	(CONT)		
WOOMER AUS WOOMER AUS WOOMER AUS PERTH AUS JOHBG C S AF	31 06 07 S 31 06 07 S 31 06 07 S 32 00 07 S 26 07 00 S	136 47 07 136 47 07 136 47 07 135 51 10 028 00 00	162 162: 162 5	09 05 36.65 09 05 52.97 09 D6 03.62 10 42 50.70 17 42 27.00	042 00 36 041 12 36 040 44 06 209 54 00 010 26 00 *	05 35 06 04 07 12 03 11 31 34 12 00 10 00 00 *
UNION JOHSBG . UNION JOHSBG UNION JOHSBG UNION FR	26 10 55 S 26 10 55 S 26 10 55 S 26 10 55 S 48 48 18 N	028 04 30 028 04 30 028 04 30 028 04 30 002 13 52	1806 1806 1806 1806 162	17 42 28.00 17 42 31.60 17 43 04.00 17 43 21.50 21 27 47.10	010 23 00 * 01D 27 00 * 300 00 00 010 55 00 * 225 45 00	10 30 00 * 13 00 00 00 00 00 00 00 00 00 00 00 00 00
MEUDON FR MEUOON FR MEUOON FR SNEEK NETH MEUODN FR	48 48 18 N 48 48 18 N 48 48 18 N 53 02 25 N 48 48 18 N	002 13 52 002 13 52 002 13 52 005 39 52 002 13 52	162 162 162	21 28 08.80 21 28 20.20 21 28 37.90 21 28 38.90 21 29 01.30	229 19 00 232 43 00 245 39 00 016 08 24 * 344 42 00	31 34 00 39 39 00 57 37 00 16 00 00 * 71 12 00
PIC MIDI FR PIC MIDI FR MEUOON FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 48 48 18 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 002 13 52 000 08 32 000 08 32	2862 2862 162 2862 2862	21 29 04.00 21 29 15.00 21 29 20.20 21 29 21.00 21 29 30.00	263 54 00 273 12 00 019 00 00 291 48 00 294 00 00	23 24 00 26 54 00 50 28 00 29 24 00 31 30 00
PIC MIDI FR MEUDON FR PIC MIDI FR PIC MIDI FR MEUDON FR	42 56 12 N 48 48 18 N 42 56 12 N 42 56 12 N 48 48 18 N	000 08 32 002 13 52 000 08 32 000 08 32 002 13 52	2862 162 2862 2862 162	21 29 36.00 21 29 38.60 21 29 42.00 21 29 55.00 21 29 57.20	303 54 00 027 09 00 314 48 00 328 48 00 030 28 00	32 24 00 36 01 00 32 18 00 30 24 00 26 54 00
PIC MIDI FR PIC MIDI FR PIC MIDI FR MEUOON FR PIC MIDI FR	· 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 48 48 18 N 42 56 12 N	000 08 32 000 08 32 000 08 32 002 13 52 000 08 32	2862 2862 2862 162 2862	21 30 01.00 21 30 10.00 21 30 16.00 21 30 19.00 21 30 27.00	336 12 00 345 30 00 348 54 00 032 42 00 356 42 00	28 24 00 25 36 00 24 24 00 20 13 00 21 24 00
MEUDON FR BERLN SG GER PIC MIDI FR MEUDON FR MEUDON FR	48 48 18 N 52 28 30 N 42 56 12 N 48 48 18 N 48 48 18 N	002 13 52 013 20 30 000 08 32 002 13 52 002 13 52	162 50 2862 162 162	21 30 34.40 21 30 34.60 21 30 35.00 21 30 56.40 21 31 09.20	033 40 00 305 05 48 359 48 00 034 43 00 035 09 00	16 35 00 34 48 00 20 12 00 12 54 00 11 04 00
COPNGN A DEN JOKNN OB FIN MEUDON FR JOKNN OB FIN JOKNN OB FIN	55 44 41 N 60 48 50 N 48 48 18 N 60 48 50 N 60 48 50 N	012 33 09 023 30 09 002 13 52 023 30 09 023 30 D9	103 162 103 103	21 31 10.04 21 31 22.20 21 31 25.70 21 31 31.60 21 31 39.50	016 16 00 <b>4</b> 237 12 00 035 37 00 237 12 00 237 12 00	59 C0 00 # 17 06 00 09 18 00 19 18 00 21 48 00
MEUOON FR JOKNN OB FIN COPNGN A DEN JOKNN OB FIN JOKNN OB FIN	48 48 18 N 60 48 50 N 55 44 41 N 60 48 50 N 60 48 50 N	002 13 52 023 30 09 012 33 09 023 30 09 023 30 09	162 103 103 103	21 31 52.70 21 31 57.50 21 32 00.00 21 32 04.00 21 32 10.70	036 11 00 237 06 00 000 48 00 0 237 00 00 237 00 00	06 36 00 28 06 00 59 10 00 # 31 06 00 34 54 00
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 32 21.10 21 32 30.90 21 32 40.70 21 32 48.50 21 33 40.30	236 48 00 236 42 00 236 24 D0 235 18 00 059 30 00	41 12 00 49 00 00 57 48 00 66 18 00 52 36 00
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 34 20.90 21 34 32.50 21 34 36.70 21 34 44.00 21 34 54.50	058 42 00 058 42 00 058 42 00	30 48 00 27 36 00 26 24 00 24 30 00 22 06 00
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 35 03.70 21 35 12.40 21 35 19.10 21 35 29.50 21 35 36.90	0 058 42 00 0 058 48 00 0 058 48 00	20 18 00 18 48 00 17 36 00 16 12 00 15 00 00
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 M 60 48 50 M 60 48 50 M	023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 35 45.50 21 35 53.30 21 36 05.20 21 36 19.90 21 36 36.90	0 058 48 00 0 058 54 00 0 058 54 00	14 06 00 13 12 00 11 54 00 10 24 00 08 54 00
JOKNN OB FIN			103 103	21 36 55.6 21 37 16.5		07 24 00 06 00 00

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT	AZIMUTH OR	ELEVATION OR	SLAN
		2731	me reks	HR MIN SEC	RGT ASCEN *	DECLINATION#	IN K
			13 JLY 195	8			
CHI CPLN ILL CHI CPLN ILL COLUMBUS O N CANTON A O CLEVELNO A O	41 51 58 N 41 51 58 N 40 01 49 N 40 55 54 N 41 29 46 N	272 23 35 272 23 35 276 57 46 278 32 40 278 12 16	194 194 229 366 220	02 37 12.00 02 37 17.20 02 37 18.00 02 37 34.00 02 37 37.00	019 02 44 * 019 25 06 * 012 15 C0 * 011 47 00 * 296 00 00	11 22 00 * 16 16 00 * 57 18 00 * 47 36 00 *	
CLEVELNO A O MLWKEE A WIS OAYTON B O MANHTN B KAN ALBUO C NM	41 29 46 N 42 58 07 N 39 50 14 N 39 13 51 N 35 05 51 N	278 12 16 271 51 05 275 44 03 263 22 54 253 25 38	220 294 249 409 1603	02 37 43.00 02 37 52.40 02 38 26.50 02 47 41.30 04 21 04.00	012 21 00 * 021 01 00 * 001 23 12 * 049 37 00 007 39 30 *	57 00 00 # 24 00 00 # 60 30 00 # 11 29 00 58 49 00 #	
PORTLAND ORE SALSBURY AUS SALSBURY AUS WOOMER AUS SALSBURY AUS	45 29 19 N 34 43 58 S 34 43 58 S 31 06 06 S 34 43 58 S	237 22 27 138 38 47 138 38 47 136 46 54 138 38 47	46 32 32 162 -32	C6 05 25.20 09 C6 39.63 09 07 17.94 09 07 45.00 09 07 52.36	010 45 15 * 218 08 20 220 09 21 006 19 30 * 222 31 48	32 15 00 # 15 31 48 19 05 24 - 60 09 00 # 22 44 20	
WOOMER AUS SALSBURY AUS WOOMER AUS SALSBURY AUS SALSBURY AUS	31 06 06 S 34 43 58 S 31 06 06 S 34 43 58 S 34 43 58 S	136 46 54 138 38 47 136 46 54 138 38 47 138 38 47	162 32 162 32 32	09 08 01.60 09 08 14.16 09 08 18.93 09 08 50.69 09 09 06.98	006 29 00 * 224 40 30 015 44 00 * 229 12 36 231 59 16	- 60 48 00 # 25 40 12 - 61 29 00 # 30 58 51 33 35 06	•
SALSBURY AUS WOOMER AUS SALSBURY AUS WOOMER AUS WOOMER AUS	34 43 58 S 31 06 07 S 34 43 58 S 31 06 07 S 31 06 07 S	138 38 47 136 47 07 138 38 47 136 47 07 136 47 07	32 162 32 162 162	09 09 32.67 09 09 42.33 09 09 50.26 09 09 51.16 09 09 58.04	237 37 55 212 16 26 242 55 19 212 41 31 213 03 14	38 37 04 34 17 06 42 19 12 36 14 56 37 54 39	
WOOMER AUS SALSBURY AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 34 43 58 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 138 38 47 136 47 07 136 47 07 136 47 07	162 32 162 162 162	09 10 06.50 09 10 07.52 09 10 18.45 09 10 25.11 09 10 31.05	213 32 42 249 47 42 214 30 03 214 58 48 215 37 12	40 02 52 46 04 37 43 23 34 45 22 44 47 23 42	
SALSBURY AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	34 43 58 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	138 38 47 136 47 07 136 47 07 136 47 07 136 47 07	32 162 162 162 162	09 10 33.01 09 10 38.22 09 10 44.21 09 10 49.98 09 10 59.95	264 19 48 216 29 06 217 14 06 218 16 26 220 22 08	51 21 54 49 44 31 51 57 28 54 16 48 58 28 58	
WOOMER AUS AOLAIO A AUS WOOMER AUS SALSBURY AUS WOOMER AUS	31 06 07 S 34 55 14 S 31 06 07 S 34 43 58 S 31 06 07 S	136 47 07 138 36 14 136 47 07 138 38 47 136 47 07	162 55 162 32 162	09 11 06 • 01 09 11 14 • 00 09 11 15 • 82 09 11 15 • 97 09 11 22 • 19	222 06 35 292 30 00 226 00 28 300 00 25 229 39 14	61 14 06 55 00 00 65 59 52 54 21 18 69 10 30	
SALSBURY AUS WOOMPA B AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 31 06 01 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 136 47 01 138 38 47 138 38 47 138 38 47	32 160 32 32 32	09 11 42.16 09 11 49.00 09 11 57.71 09 11 58.20 09 12 12.36	321 43 12 270 00 00 284 18 32 332 22 01 339 37 08	50 09 00 81 00 00 54 28 55 46 16 58 42 05 56	
SALSBURY AUS SALSBURY AUS SALSBURY AUS WOOMER AUS WOOMER AUS	34 43 58 S 34 43 58 S 34 43 58 S 31 06 07 S 31 06 07 S	138 38 47 138 38 47 138 38 47 136 47 07 136 47 07	32 32 32 162 162	09 12 23.96 09 12 41.46 09 12 58.22 09 13 05.75 09 13 12.11	344 38 34 350 30 07 354 53 24 015 52 19 016 45 00	38 59 56 34 11 38 29 54 46 45 42 28 43 08 24	
WOOMER AUS WOOMER AUS SALSBURY AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 34 43 58 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 138 38 47 136 47 07 136 47 07	162 162 32 162 162	09 13 15*22 09 13 18*20 09 13 22*96 09 13 23*10 09 13 26*03	017 01 40 017 27 36 359 43 44 017 47 49 018 08 34	41 36 43	
WOOMER AUS WOOMER AUS WOOMER AUS SALSBURY AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 34 43 58 S 31 06 07 S	136 47 07 136 47 07 136 47 07 138 38 47 136 47 07	162 162 162 32 162	09 13 31.33 09 13 36.05 09 13 40.53 09 13 49.90 09 13 50.72	018 29 27 018 56 34 019 07 12 003 34 04 019 38 27	35 37 12 33 59 16 32 34 12 19 12 43 29 33 39	
WOOMER AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	31 06 07 \$ 34 43 58 \$ 34 43 58 \$ 34 43 58 \$ 34 43 58 \$	136 47 07 138 38 47 138 38 47 138 38 47 138 38 47	162 32 32 32 32	09 13 55.03 09 13 58.76 09 14 16.86 09 14 32.62 09 15 00.78	019 52 48 004 35 24 006 21 25 007 46 51 009 43 22	28 28 19 17 42 57 14 44 24 12 43 04 09 03 00	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32 32	09 15 15.56 09 15 34.23 09 15 43.16 09 15 58.96 09 16 08.11	010 47 06 011 30 36 012 02 34 012 44 16 013 25 37	07 32 20 05 29 49 04 43 19 03 18 39 02 33 36	

STATION	LATITUDE	LONGI TUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			13 JLY <b>1</b> 958	(CONT)			
SALSBURY AUS SALSBURY AUS WOOMER AUS KONKO J FUKUOKA 1 J	34 43 58 S 34 43 58 S 31 06 06 S 34 32 31 N 33 37 25 N	138 38 47 138 38 47 136 46 54 133 37 40 130 25 40	32 32 162 4 16	09 16 17.44 09 16 27.08 09 20 23.47 11 13 11.00 11 13 39.76	013 21 00 013 42 00 006 41 48 * 090 00 00 018 16 18 *	01 48 00 01 01 12 60 10 00 * 19 00 00 42 45 00 *	
FUKUOKA 1 J MIYAZAKI J FUKUOKA 1 J MITAKA J FUKUOKA 1 J	33 37 25 N 31 55 23 N 33 37 25 N 35 40 20 N 33 37 25 N	130 25 40 131 25 24 130 25 40 139 32 30 130 25 40	16 8 16 50 16	11 13 43.48 11 13 46.00 11 13 55.72 11 13 59.80 11 14 00.62	018 42 11 * 019 11 00 * 020 12 00 * 043 30 00 020 44 00 *	46 34 00 # - 13 00 00 # 54 10 00 # 39 12 00 55 25 00 #	
HGSHMTSYMA J TAKADA J HIMEJI J 'ASAIHKAWA J FUKUOKA 1 J	36 02 22 N 37 06 38 N 34 50 25 N 43 46 27 N 33 37 25 N	139 23 54 138 15 22 134 41 24 142 21 50 130 25 40	31 23 25 113 16	11 14 04.00 11 14 13.00 11 14 15.00 11 14 28.00 11 14 31.30	020 40 00 * 020 52 00 * 057 48 00 016 22 00 * 022 49 42 *	- 48 00 00 # - 32 00 00 # 11 30 00 26 00 00 # 55 00 00 #	
ASAHIKAWA J PORTLAND ORE JDHBG C S AF UNION JOHSBG UNION JOHSBG	43 46 27 N 45 29 19 N 26 07 00 S 26 10 55 S 26 10 55 S	142 21 50 237 22 27 C28 00 00 028 04 30 028 04 30	113 46 1615 1806 1806	11 14 48.00 12 29 59.71 16 05 42.00 16 05 43.00 16 05 44.00	017 19 00 * 010 45 15 * 016 43 00 * 016 40 00 * 016 36 12 *	21 00 00 * 32 15 00 * - 68 42 00 * - 68 30 00 * - 68 12 00 *	
PRET R S AF UNION JOHS8G PRET 8 S AF JOH8G C S AF UNION JOHS8G	25 43 43 S 26 10 55 S 25 43 43 S 26 07 00 S 26 10 55 S	028 12 42 028 04 30 028 12 42 028 00 00 028 04 30	1311 1806 1311 1615 1806	16 05 48.20 16 06 43.60 15 06 48.10 16 06 50.50 16 06 55.20	016 36 00 # 016 48 06 # 016 47 00 # 016 49 00 # 016 47 30 #	- 68 48 00 * - 41 06 00 * - 42 06 00 * - 38 00 00 * - 34 12 00 *	
UNION JOHS8G PRET 8 S AF S FERNNDO SP PIC MIDI FR PIC MIDI FR	26 10 55 S 25 43 43 S 36 27 42 N 42 56 12 N 42 56 12 N	028 04 30 028 12 42 353 47 42 000 08 32 000 08 32	1806 1311 30 2862 2662	16 06 56.30 16 09 38.90 21 35 44.20 21 37 31.00 21 37 39.00	016 46 54 * 017 13 00 * 008 19 30 * 293 00 00 297 18 00	- 34 12 00 * 25 00 00 * 52 40 00 * 13 24 00 13 48 00	
PIC MIDI FR PIC MIDI FR CAMBR U ENG PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 52 12 51 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 05 41 000 08 32 000 08 32	2862 2862 2862 2862 2862	21 37 47.00 21 37 54.00 21 37 58.20 21 38 02.50 21 38 10.00	302 06 00 305 18 00 224 12 00 311 18 00 315 48 00	14 12 00 14 18 00 12 48 00 14 18 00 14 18 00	
SEAFORD ENG PIC MIDI FR MEUOON FR PIC MIDI FR PIC MIDI FR	50 48 00 N 42 56 12 N 48 48 18 N 42 56 12 N 42 56 12 N	000 C6 00 000 08 32 002 13 52 000 08 32 000 08 32	2862 162 2862 2862	21 38 13.00 21 38 21.50 21 38 25.90 21 38 28.00 21 38 34.00	013 25 00 * 322 42 00 267 22 00 326 48 00 339 00 00	- 02 00 00 # 14 12 00 20 03 00 14 00 00 13 48 00	S 11
MEUDON FR PIC MIDI FR SEAFORO ENG PIC MIDI FP HORS8RDG ENG	48 48 18 N 42 56 12 N 50 48 00 N 42 56 12 N 50 53 00 N	002 13 52 000 08 32 000 06 00 000 08 32 000 15 00	162 2862 2862	21 38 41.60 21 38 42.50 21 38 43.00 21 38 50.50 21 38 55.00	278 07 00 334 30 00 013 45 00 * 338 18 00 249 00 00	23 55 00 13 24 00 23 00 00 13 00 00 39 00 00	•
MEUDON FR PIC MID: FR FARNHAM ENG PIC MID! FR CHELMSFD ENG	48 48 18 N 42 56 12 N 51 12 00 N 42 56 12 N 51 43 00 N	002 13 52 000 08 32 359 12 00 000 08 32 000 30 00	162 2862 2862	21 38 57.90 21 38 58.00 21 39 04.00 21 39 05.00 21 39 10.00	290 05 00 341 42 00 014 36 00 4 344 48 00 014 10 00 4	11 54 00	
CAMBR U ENG PIC MIDI FR MEUDON FR PIC MIDI FR SEAFORD ENG	52 12 51 N 42 56 12 N 48 48 18 N 42 56 12 N 50 48 DO N	000 05 41 000 08 32 002 13 52 000 08 32 000 06 00	28 2862 162 2862	21 39 10.60 21 39 11.50 21 39 15.20 21 39 21.00 21 39 25.00	230 06 00 347 13 00 307 08 00 351 18 00 013 26 00	43 18 00 11 30 00 30 17 00 10 42 00 \$4 00 00	•
HORSBROG ENG PIC MIDI FR MEUDON FR PIC MIDI FR PIC MIDI FR	50 53 00 N 42 56 12 N 48 48 18 N 42 56 12 N 42 56 12 N	000 15 00 000 08 32 002 13 52 000 08 32 000 08 32	2862 162 2862 2862	21 39 26.00 21 39 28.50 21 39 30.10 21 39 36.00 21 39 42.50	353 48 00 322 57 00 356 06 00	58 00 00 10 12 00 30 41 00 09 36 00 09 06 00	
MEUDON FR PIC MIDI FR SEAFORD ENG HORSBRDG ENG GELEEN NETH	48 48 18 N 42 56 12 N 50 48 00 N 50 53 00 N 50 57 55 N	.002 13 52 000 08 32 000 06 00 000 15 00 005 49 27		21 39 46.50 21 39 51.50 21 39 52.00 21 39 52.00 21 39 56.40	000 36 00 005 05 00 001 00 00	50 00 00	
PIC MIDI FR MEUDON FR PIC MIDI FR PIC MIDI FR SEAFORD ENG	42 56 12 N 48 48 18 N 42 56 12 N 42 56 12 N 50 48 00 N	000 06 32 002 13 52 000 08 32 000 08 32 000 06 00	162 2862 2862	21 39 59 50 21 40 04 30 21 40 09 00 21 40 18 00 21 40 22 00	352 31 00 005 00 00 006 54 00	. C7 42 00 25 27 00 07 00 00 06 24 00 * 64 00 00	•

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STATION	LATITUDE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			13 JLY 195	B (CONT)			
PIC MIDI FR BEXHILL ENG BATTERSE ENG MEUOON FR PIC MIOI FR	42 56 12 N 50 51 00 N 51 28 00 N 48 48 18 N 42 56 12 N	000 08 32 000 30 00 359 51 00 002 13 52 000 08 32	2862 162 2862	21 40 26.50 21 40 27.00 21 40 28.20 21 40 29.10 21 40 34.50	008 24 00 002 00 00 * 000 57 00 * 005 13 00 009 42 00	05 00 00 63 30 00 * 60 24 00 * 20 14 00 05 12 00	
BERLN SG GER PIC MIDI FR MEUOON FR PIC MIOI FR MEUOON FR	52 28 30 N 42 56 12 N 48 48 18 N 42 56 12 N 48 48 18 N	013 20 30 000 08 32 002 13 52 000 08 32 002 13 52	50 2862 162 2862 162	21 40 34.60 21 40 44.50 21 40 45.70 21 40 53.00 21 41 04.30	274 24 24 011 36 00 011 14 00 012 54 00 016 12 00	18 24 00 04 42 00 17 14 00 04 00 00 14 20 00	
BERLN SG GER SEAFORD ENG CAMBR U ENG COPNGN A DEN COPNGN A DEN	52 28 30 N 50 48 00 N 52 12 51 N 55 44 41 N 55 44 41 N	013 20 30 000 06 00 000 05 41 012 33 09 012 33 09	50 28	21 41 14.60 21 41 28.00 21 41 46.10 21 42 11.00 21 42 37.04	299 06 24 001 13 00 * 040 00 00 012 35 00 * 011 22 00 *	22 42 00 36 00 00 * 14 36 00 41 00 00 * 63 18 00 *	
CAMBR U ENG COPNGN 8 DEN SJUAN-GS ARG	52 12 51 N 55 42 13 N 31 30 37 S	000 05 41 012 27 09 291 22 46	28 10 650	21 42 47.40 22 40 07.40 23 00 12.00	041 00 00 074 48 00 011 13 00 *	07 42 00 14 42 00 = 19 24 00 *	"
		11	14 JLY 19			•	
WPALMB A FLA FT WTH N TEX WICHITA KAN OALLAS P TEX FT WTH C TEX	26 39 30 N 32 44 40 N 37 41 44 N 32 51 10 N 32 42 15 N	279 55 20 262 37 54 262 45 19 263 14 29 262 37 30	5 186 413 172 204	00 59 26.00 02 44 25.00 02 44 25.70 02 45 01.50 02 45 10.00	090 00 00 015 37 25 * 015 46 00 * 018 40 00 * 020 48 00 *	14 00 00 13 00 00 * - 35 54 00 * 61 18 00 * 60 00 00 *	
BTLSVL A OKL TERRHAUT IND TERRHAUT INO DANVILLE ILL CHI CPLN ILL	36 42 18 N 39 31 38 N 39 31 38 N 40 08 57 N 41 51 58 N	264 03 36 272 36 10 272 36 10 272 22 26 272 23 35	213 155 155 189 194	02 46 04.50 02 46 29.50 02 46 30.43 02 47 02.00 02 47 25.00	020 40 00 * 270 00 00 270 00 00 292 30 00 012 23 10 *	45 24 00 * 38 28 00 38 16 48 38 30 00 51 50 00 *	
CHI CPLN ILL MANHTN 8 KAN DAYTON B 0 LEMONT ILL CHI FAXN ILL	41 51 58 N 39 13 51 N 39 50 14 N 41 41 48 N 41 59 00 N	272 23 35 263 22 54 275 44 03 272 00 19 272 21 00	194 409 249 229 218	02 47 29.30 02 47 41.00 02 47 41.00 02 47 54.00 02 48 05.00	012 14 12 * 050 06 00 009 15 00 * 000 00 00 00 00	58 09 00 * 11 25 00 50 00 00 * 35 06 00 30 00 00	
MLWKEE A WIS OUNLAP ONTAR MEUOON FR EOW AF O CAL EDW AF O CAL	42 58 07 N 43 51 46 N 48 48 18 N 34 56 43 N 34 56 43 N	271 51 05 280 34 40 002 13 52 242 04 58 242 04 58	294 244 162 785 785	02 48 52 80 92 49 14 00 03 03 40 80 04 27 47 00 04 28 16 00	001 02 00 * 010 15 00 * 042 48 00 236 13 51 247 57 28	58 30 00 * 44 30 00 * 20 10 00 14 13 48 21 19 30	
EDW AF O CAL EDW AF D CAL EDW AF O CAL EOW AF O CAL CHIN LAK CAL	34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N 35 39 25 N	242 04 58 242 04 58 242 04 58 242 04 58 242 20 13	785 785 785 785 701	04 28 46.00 04 29 03.00 04 29 16.00 04 29 46.00 04 29 59.00	273 00 00 296 23 56 315 48 14 347 30 00 006 53 00 **	31 04 30 34 43 15 33 51 18 25 02 20 77 00 00 #	
PORTLAND ORE EOW AF O CAL EDW AF O CAL EOW AF O CAL EOW AF O CAL	45 29 19 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	237 22 27 242 04 58 242 04 58 242 04 58 242 04 58	46 785 785 785 785	04 30 11.80 04 30 16.00 04 30 46.00 04 31 16.00 04 31 46.00	113 00 00 002 41 13 019 31 40 015 07 48 018 08 34	15 00 00 16 55 19 11 32 52 07 46 19 04 52 12	
EDW AF D CAL EOW AF D CAL PORTLANO ORE OTSU J HIROSHIMA J	34 56 43 N 34 56 43 N 45 29 19 N 35 00 24 N 34 22 08 N	242 04 58 242 04 58 237 22 27 135 52 08 132 28 10	46 90	04 32 16.00 04 32 31.00 06 17 34.20 11 14 15.00 11 22 13.00	020 14 06 020 28 40 009 55 15 4 057 48 00 015 39 00 4	11 30 DO	
YATSUSHIRO J FUCHU J TOKUSHIMA J HIMEJI J ASAHIKAWA J	32 30 21 N 34 34 17 N 34 07 34 N 34 50 25 N 43 46 27 N	130 36 15 133 14 19 134 35 32 134 41 24 142 21 50	30 1 25	11 22 20.00 11 22 56.00 11 23 07.00 11 23 18.00 11 23 36.00	090 0D 00 017 54 00 1 000 00 00 007 54 00 013 22 00 1	46 00 00 46 00 00	
T ILUT TM NAGANO J MAGANAY MAGAMAY MIZUMANUSIM	35 31 20 N 35 00 24 N 35 30 50 N 38 15 16 N 36 00 56 N	135 52 08 137 50 44 140 20 59	90 500 151	11 23 38.00 11 23 42.00 11 24 27.00 11 24 34.00 11 24 44.00	012 26 00 9 001 49 00 9 012 20 00 9 334 12 00	* 57 00 00 * 90 00 00	
SAPPORO J SAPPORO J ASAHIKAWA J PRET 8 S AF UNION JOHSBG	43 04 49 N 43 04 49 N 43 46 27 N 25 43 43 S 26 10 55 S	141 22 13 142 21 50 028 12 43	20 113 2 1311	11 24 52.00 11 25 27.00 11 25 36.00 16 15 13.30 16 16 07.30	015 08 00 013 45 00 009 46 00	* 73 00 00 * 50 00 00 * - 65 06 00	*

STATION	LATITUOE	LONGITUOE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
		3	14 JLY 1958	(CONT)			
PRET B S AF PRET B S AF PRET B S AF UNION JOHSBG UNION JOHSBG	25 43 43 S 25 43 43 S 25 43 43 S 26 10 55 S 26 10 55 S	028 12 42 028 12 42 028 12 42 028 12 42 028 04 30 028 04 30	1311 1311 1311 1806 1806	16 16 12.60 16 16 35.70 16 17 33.00 16 17 55.50 16 18 28.50	012 07 00 * 012 52 00 * 015 04 00 * 014 37 00 * 015 02 00 *	- 51 24 00 * - 40 06 00 * 26 54 00 * 14 24 00 * 27 06 00 *	
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 52 26 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30 013 20 30 013 20 30	50 50 50 50	20 04 37.80 20 04 51.90 20 05 08.90 20 05 24.90 20 05 40.90	146 21 08 122 57 08 107 21 08 092 03 08 080 33 08	33 06 00 34 54 00 34 06 00 30 36 00 26 18 00	
BERLN SG GER BERLN SG GER PIC MIDI FR PIC MIOI FR PIC MIOI FR	52 28 30 N 52 28 30 N 42 56 12 N 42 56 12 N 42 56 12 N	013 20 30 013 20 30 000 08 32 000 08 32 000 08 32	50 50 2862 2862 2862	20 05 55.90 20 06 11.90 21 46 42.00 21 46 55.50 21 47 04.50	072 57 08 112 12 00 286 18 00 290 18 00 292 30 00	22 54 00 19 12 00 04 30 00 05 18 00 05 48 00	
PIC MIOI FR PIC MIDI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	21 47 12.00 21 47 22.50 21 47 32.50 21 47 42.00 21 47 49.50	295 54 00 300 06 00 303 36 00 307 24 00 310 42 00	06 12 00 06 36 00 07 00 00 07 18 00 07 36 00	
PIC MIOI FR PIC MIOI FR PIC MIDI FR PIC MIOI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 06 32	2862 2862 2862 2862 2862	21 47 56 00 21 48 05 50 21 48 14 00 21 48 21 50 21 48 36 00	313 24 00 316 54 00 320 42 00 323 24 00 329 12 00	07 42 00 07 54 00 08 00 00 08 00 00 07 46 00	
PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 05 32	2862 2862 2862 2862 2862	21 48 46.50 21 48 55.50 21 49 03.50 21 49 12.50 21 49 19.00	333 12 00 336 18 00 339 12 00 342 18 00 344 15 00	07 42 00 07 30 00 07 12 00 06 48 00 06 36 00	
SEAFORO ENG PIC MIOI FR HORSBRDG ENG HARROGTE ENG PIC MIOI FR	50 48 00 N 42 56 12 N 50 53 00 N 53 59 00 N 42 56 12 N	000 06 00 000 08 32 000 15 00 358 26 00 000 03 32	2862	21 49 25 • 00 21 49 27 • 00 21 49 30 • 00 21 49 36 • 00 21 49 38 • 50	010 10 00 # 346 54 00 010 00 00 # 013 57 00 # 350 30 00	50 00 00 * 06 18 00 57 00 00 * 53 30 00 * 05 54 00	•
URMSTON ENG PIC MIO1 FR	53 27 00 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	357 39 00 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862	21 49 43.00 21 49 46.00 21 49 55.00 21 50 01.50 21 50 11.00	014 30 00 * 352 06 00 . 354 36 00 356 12 00 358 30 00	76 00 00 4 05 30 00 05 06 00 04 48 00 04 24 00	•
PIC MIDI FR PIC MIDI FR PIC MIDI FR HARROGTE ENG PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 53 59 00 N 42 56 12 N	000 08 32 000 08 32 000 08 32 358 26 00 000 08 32	2862 2862 2862 2862	21 50 19.00 21 50 27.50 21 50 36.50 21 50 38.00 21 50 46.00	000 24 00 002 00 00 003 54 00 001 09 00 *	04 00 00 03 18 00 03 12 00 60 30 00 02 42 00	*
PIC MIOI FR PIC MIOI FR PIC MIOI FR SEAFORD ENG PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 50 48 00 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 06 00 000 08 32	2862 2862 2862 2862	21 50 54.00 21 51 03.00 21 51 11.50 21 51 19.00 21 51 20.50	006 48 00 008 30 00 010 00 00 005 50 00 *	02 24 00 01 54 00 01 30 00 55 00 00 01 18 00	*
COPNGN U OEN COPNGN 8 OEN HARROGTE ENG SJUAN-GS ARG	55 41 12 N 55 42 13 N 53 59 00 N 31 30 37 S	012 34 40 012 27 09 358 26 00 291 22 46	14 10 650	21 51 31.04 21 53 03.30 22 39 14.00 23 10 44.00	011 06 00 *	54 42 00 45 00 00	*
WPALMS A FLA	26 39 30 N	279 55 20	15 JLY 19	01 08 39.00	270 00 00	89 OC OO	
WASHGTN A OC WASHGTN A OC WASHGTN A OC APLINGTON VA	38 45 30 N 38 45 30 N 38 45 30 N 38 50 48 N	282 47 30 282 47 30 282 47 30	69 69 69 59	01 10 40.00 01 11 01.00 01 11 46.00 01 11 50.00	016 40 00 * 017 18 12 * 019 44 00 *	- 29 48 00 - 21 43 00 11 36 00	*
WASHGTN A OC GRNSBRO A NC CAMBROG MASS CAMBROG MASS CAMBROG MASS		280 07 57 288 52 14 288 52 14	69 265 24 24 24	01 12 56.00 01 20 30.00 01 21 14.80 01 21 22.20 01 21 48.00	020 40 00 4 0 252 12 00 0 258 24 00		
CAMBRDG MASS CAMBRDG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14	24 24 24 24 24	01 21 56.00 01 22 01.66 01 22 03.50 01 22 05.16 01 22 06.20	302 00 00 300 00 00 307 00 00	35 00 00 36 48 00 36 00 00 37 00 00 37 18 00	

STATION	LATITUDE	LONGITUDE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN •	ELEVATION DR DECLINATION*	SLAN RANG IN K
	Entitode		15 JLY 1958				•.,
CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 289 52 14 289 52 14 288 52 14 288 52 14	24 24 24 24 24 24	01 22 09 • 40 01 22 10 • 00 01 22 13 • 70 01 22 16 • 00 01 22 34 • 60	314 54 00 310 00 00 318 54 00 321 18 00 345 00 00	37 06 00 36 00 00 36 06 0D 35 24 00 30 18 0D	
CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	01 22 38.60 01 22 41.40 01 22 44.60 01 22 46.00 01 22 53.10	347 42 00 349 24 00 350 36 00 350 00 00 357 48 00	29 06 00 28 18 00 27 30 00 26 00 00 25 00 00	
CAMBROG MASS CAMBRDG MASS CAMBRDG MASS CAMBROG MASS S ANT A TEX	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 29 27 48 N	288 52 14 288 52 14 288 52 14 288 52 14 261 30 56	24 24 24 24 256	01 22 58 80 01 23 09 20 01 23 35 50 01 23 57 40 02 52 48 50	001 12 00 005 12 00 013 00 00 017 06 00 270 00 00	22 18 00 18 18 00 13 30 00 11 12 00 14 40 00	
ALMGROO A NM EDINBURG TEX ALBUD A NM DALLAS P TEX ALMGRDO B NM	32 52 24 N 26 18 20 N 35 05 03 N 32 51 10 N 32 54 49 N	254 02 58 261 49 39 253 21 24 263 14 29 254 02 54	1335 28 1520 172 1300	02 52 52 00 02 53 20 80 02 53 23 00 02 53 40 80 02 53 47 00	016 39 00 * 316 00 00 018 59 00 * 011 00 00 * 019 24 00 *	- 29 55 00 * 12 00 0C - 05 18 00 * 06 50 0C * 20 05 00 *	
OK CY A OKLA OK CY A OKLA LAWTON OKLA TULSA OKLA ST PL B MINN	35 33 50 N 35 33 50 N 34 39 44 N 36 04 0D N 44 58 30 N	262 29 20 262 29 20 261 35 47 264 03 00 266 45 59	360 360 358 204 285	02 54 29 00 02 55 04 00 02 55 39 00 02 55 49 00 02 57 13 40	011 24 00 * 010 32 D0 * 002 35 00 011 12 00 * 00D 00 00	15 40 00 # 55 50 00 # 24 52 00 21 00 00 # 90 00 00	
EDW AF D CAL CHIN LAK CAL EOW AF D CAL SACMTO E CAL EDW AF D CAL	34 56 43 N 35 39 25 N 34 56 43 N 38 32 55 N 34 56 43 N	242 04 58 242 20 13 242 04 58 238 14 51 242 04 58	785 701 785 15 785	04 37 49.00 04 37 56.50 04 38 19.00 04 38 42.32 04 38 49.11	271 13 12 270 00 00 286 06 36 012 04 45 * 303 13 12	09 21 32 08 00 00 11 31 26 13 17 00 # 12 41 16	
EDW AF D CAL EDW AF O CAL EDW AF O CAL SPOKN A WASH EOW AF D CAL	34 56 43 N 34 56 43 N 34 56 43 N 47 37 37 N 34 56 43 N	242 04 58 242 04 58 242 04 58 242 38 59 242 04 58	785 785 785 706 785	04 39 49.00 04 40 19.00 04 40 49.00 04 41 22.50 04 41 49.00	335 06 D0 346 37 40 355 05 31 090 00 00 006 11 27	10 30 43 08 17 16 06 04 22 85 30 00 92 09 28	
MIYAZAKI J NAGASAKI 1 J MIYAZAKI J YAMAGATA J HIROSHIMA J	31 55 23 N 32 46 53 N 31 55 23 N 38 15 16 N 34 22 08 N	131 25 24 129 51 56 131 25 24 140 20 59 132 28 10	8 15 8 151 3	11 30 44.00 11 31 46.00 11 31 49.00 11 33 06.00 11 33 16.00	011 07 00 # 010 16 00 # 009 30 00 # 322 00 00 000 00 00	02 00 00 # 59 00 00 # 52 00 00 # 19 30 00 12 30 00	
MUSASHINO J SAPPORO J ASAHIKAWA J AKITA J SAPPORO J	35 42 58 N 43 04 49 N 43 46 27 N 39 41 42 N 43 04 49 N	139 34 35 141 22 13 142 21 50 140 07 02 141 22 13	75 20 113 6 20	11 33 29.00 11 34 14.60 11 34 27.00 11 34 27.00 11 35 00.00	315 00 00 011 06 00 * 011 50 00 * 011 57 00 * 009 25 00 *	09 30 C0 21 00 00 4 15 00 00 4 17 00 00 4 51 00 00 4	•
SSLVDR A BWI SSLVDR A BWI PRET B S AF PRET B S AF JOHBG C S AF	24 07 23 N 24 07 23 N 25 43 43 S 25 43 43 S 26 07 DO S	285 32 53 285 32 53 028 12 42 028 12 42 028 00 00	1311 1311 1615	12 58 36.00 12 59 06.00 16 26 24.00 16 26 34.20 16 26 53.70	235 39 00 349 56 24 010 49 00 * 011 02 00 * 011 30 00 *	03 00 00	•
ATHENS GR ATHNS PLE GR ATHENS GR ATHNS PLE GR ATHENS GR	37 58 19 N 38 02 50 N 37 58 19 N 38 02 50 N 37 5B 19 N	023 43 01 023 51 45 023 43 01 023 51 45 023 43 01	110 509 110 509 110	18 26 02.50 18 26 36.00 18 26 39.50 18 26 58.00 18 27 23.00	226 12 0D 018 46 48 * 073 00 0D 019 46 12 * 045 48 00	46 48 00	
LAPLAT C ARG EDW AF O CAL EOW AF D CAL EOW AF D CAL EDW AF O CAL	34 54 26 S 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	302 05 30 242 04 58 242 04 58 242 04 58 242 04 58	785 785 785 785	21 35 00 • 00 21 38 56 • 00 21 39 19 • 00 21 41 19 • 00 21 42 19 • 00	013 00 36 * 307 17 31 33D 25 12 001 26 49 009 48 14	11 06 24 12 42 54 12 10 48 04 04 08 00 39 39	•
EDW AF O CAL CAMBR U ENG JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	34 56 43 N 52 12 51 N 60 48 50 N 60 48 50 N 6D 48 50 N		785 28 103 103 103	21 42 36 00 22 00 30 60 22 01 28 60 22 01 44 40 22 01 54 00	010 02 38 009 54 00 285 24 00 290 24 00 294 12 00	00 32 34 17 00 00 21 30 00 25 42 00 28 30 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	6D 48 50 N 6O 48 50 N 6O 48 50 N 6O 48 50 N 6O 4B 50 N	023 30 09 023 30 09 023 30 09		22 D2 03 050 22 02 11 020 22 02 27 080 22 02 45 040 22 03 09 070	303 36 00 315 24 00 332 06 00	31 24 00 33 54 00 38 48 00 42 48 00 43 42 00	

STATION	LATITUDE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			15 JLY 1958	(CONT)			
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 03 18.80 22 03 51.60 22 04 00.60 22 04 17.40 22 04 26.20	006 30 00 039 12 00 034 42 00 041 12 00 044 00 00	42 42 00 35 18 00 33 06 00 29 06 00 27 24 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 04 35.30 22 05 02.40 22 05 10.00 22 05 25.60 22 05 34.60	046 24 00 051 48 00 053 12 00 055 30 00 056 36 00	25 36 00 21 12 00 19 54 00 17 48 00 16 42 00	
JOKNN OR FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 05 52•20 22 06 16•60 22 06 27•20 22 06 50•80 22 07 06•40	058 24 00 060 30 00 061 18 00 062 48 00 063 18 00	14 42 00 12 24 00 11 24 00 09 30 00 08 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 4B 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 07 18.40 22 07 28.80 22 07 45.00 22 08 03.00 22 08 19.20	064 18 00 064 48 0D 065 30 00 066 12 00 066 42 00	07 30 00 06 48 00 05 48 00 04 48 00 03 54 00	
HUANCAYO PER HUANCAYO PER HUANCAYO PER	12 01 27 S 12 01 27 S 12 01 27 S	284 40 28 284 40 28 284 40 28	3476 3476 3476	23 23 42.00 23 23 48.00 23 23 54.00	013 10 00 * 013 20 00 * 013 35 00 *	- 06 48 00 * - 01 00 00 * 08 30 00 *	٠
MILLBROOK NY			16 JLY 1958	l			
WPALMB A FLA WPALMB A FLA GRNSBRO A NC BRISTOL TENN	41 51 30 N 26 39 30 N 26 39 30 N 36 04 38 N 36 35 03 N	286 22 33 279 55 20 279 55 20 280 07 57 277 50 31	243 5 5 265 527	00 21 44.00 01 77 17.00 01 18 24.83 01 19 43.00 01 19 58.00	012 08 00 # 270 00 00 009 05 00 # 014 15 00 # 090 00 00	56 30 00 * 17 00 00 53 59 00 * 19 00 00 * 44 45 00	
N CANTON A O BRYN ATHN PA FT BELVR VA BALTIMORE MO PITTSBGH PA	40 55 54 N 40 08 00 N 38 45 30 N 39 24 28 N 40 29 00 N	278 32 40 284 56 00 282 48 42 283 24 35 280 00 00	366 85 85 144 381	01 20 15.00 01 20 17.00 01 20 37.00 01 20 42.00 01 20 44.00	017 14 00 * 012 20 00 * 270 00 00 130 07 00	- 19 00 00 * 58 00 00 * 62 00 00 61 30 00 42 18 00	
CLEVELND A O FT BELVR VA DOVER NJ CAMBRDG MASS CAMBRDG MASS	41 29 46 N 38 45 30 N 40 57 30 N 42 22 47 N 42 22 47 N	278 12 16 282 48 42 285 28 15 288 52 14 288 52 14	220 85 267 24 24	01 20 54.00 01 21 02.00 01 21 13.00 01 21 14.80 01 21 22.00	113 00 00 000 00 00 275 00 00 252 12 00 258 24 00	25 00 00 49 00 00 49 00 00 23 06 00	
MIL RAO MASS PATERSON NJ MILLBROOK NY CAMBRDG MASS CAMBROG MASS	42 37 03 N 40 54 00 N 41 51 30 N 42 22 47 N 42 22 47 N	288 30 28 285 51 00 286 22 33 288 52 14 288 52 14	155 30 243 24 24	01 21 32.00 01 21 34.00 01 21 44.00 01 21 48.00 01 21 56.00	262 12 00 012 24 00 * 012 38 00 * 028 00 00 290 00 00	25 18 00 31 48 00 57 12 00 * 56 30 00 * 34 00 00	441
CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	01 22 01.60 01 22 03.50 01 22 05.10 01 22 06.20 01 22 09.40	302 00 00 300 00 00 307 00 00 308 54 00 314 54 00	36 48 00 36 00 00 37 00 00 37 18 00	
CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	28B 52 14 2B8 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	01 22 10.00 01 22 13.70 01 22 16.00 01 22 23.50 01 22 34.00	310 00 00 318 54 00 320 00 00 330 00 00 340 00 00	37 06 00 36 00 00 36 06 00 35 00 00 33 00 00	,
CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	01 22 34.60 01 22 38.60 01 22 41.40 01 22 44.60 01 22 46.00	2/5 22 22	31 00 00 30 18 00 29 06 00 28 18 0D 27 30 00	
MIL RAD MASS CAMBRDG MASS SCHNTDY A NY CAMBRDG MASS CAMBRDG MASS	42 37 03 N 42 22 47 N 42 53 32 N 42 22 47 N 42 22 47 N	28B 30 28 2B8 52 14 285 58 57 288 52 14 288 52 14	155 24 235 24 24	01 22 48.50 01 22 53.10 01 22 54.60 01 22 58.80 D1 23 09.20	357 30 00 357 48 00 000 05 00 # 001 12 00 005 12 00	26 00 00 27 24 00 25 00 00 58 20 00 * 22 18 00	512
MIL RAD MASS CAMBRDG MASS CAMBRDG MASS MEUDON FR AMRLLO A TEX	42 37 03 N 42 22 47 N 42 22 47 N 48 48 1B N 35 11 30 N	28B 3D 28 288 52 14 288 52 14 002 13 52 258 03 28	155 24 24 162 1136	01 23 24.60 01 23 35.50 01 23 57.40 D2 29 47.60 02 38 D9.40	012 24 00 013 00 00 017 06 00 332 33 00 013 27 00 *	18 18 00 17 54 00 13 30 00 11 12 00 43 41 00 - 11 12 00 *	

STATION	LATITUDE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			16 JLY 1958	(CONT)			
MANHTN M KAN MANHTN M KAN MANHTN M KAN LAWTON OKLA MANHTN A KAN	39 12 12 N 39 12 12 N 39 12 12 N 34 39 44 N 39 15 58 N	263 56 12 263 56 12 263 56 12 261 35 47 263 22 38	366 366 366 358 408	03 03 50.00 03 04 06.00 03 04 24.00 03 05 32.00 03 06 30.00	010 59 20 * 010 46 06 * 010 36 24 * 352 00 00 004 30 00 *	05 36 00 * 13 42 00 * 18 42 00 * 08 00 00 62 00 00 *	
MLWKEE B WIS MANHTN A KAN MANHTN A KAN MANHTN A KAN MANHTN A KAN	42 59 25 N 39 15 58 N 39 15 58 N 39 15 58 N 39 15 58 N	272 01 15 263 22 38 263 22 38 263 22 38 263 22 38	408 408 408	03 06 35.00 03 06 38.00 03 06 47.00 03 07 05.00 03 07 13.00	314 00 00 004 07 28 * 003 48 17 * 003 21 05 * 003 12 43 *	10 30 00 60 50 00 * 59 50 00 * 57 50 00 * 56 50 00 *	
MLWKEE B WIS MANHTN A KAN MANHTN A KAN MANHTN A KAN SACMTO A CAL	42 59 25 N 39 15 58 N 39 15 58 N 39 15 58 N 38 38 25 N	272 01 15 263 22 38 263 22 38 263 22 38 263 22 38 238 43 24	408 408 408 180	03 07 18.00 03 07 21.00 03 07 30.00 03 07 36.80 04 47 56.90	333 00 00 003 04 21 * 002 56 00 * 009 29 30 010 13 56 *	13 00 00 55 45 00 # 54 45 00 # 05 42 00 23 42 00 #	
PORTLAND ORE ELTHRA A BW! WASHGTN A OC WASHGTN A DC WASHGTN A DC	45 29 19 N 25 16 03 N 38 45 30 N 38 45 30 N 38 45 30 N	237 22 27 283 41 12 282 47 30 282 47 30 282 47 30	46 38 69 69	04 49 39.40 05 47 35.23 08 36 14.00 08 36 36.00 08 38 24.00	012 20 30 * 228 15 36 005 48 00 * 005 14 00 * 004 37 00 *	57 15 00 * 81 53 06 38 48 00 * 29 54 00 * 15 30 00 *	
ASAHIKAWA J OLFSFIN S AF ATHNS PLE GR ATHNS PLE GR ATHNS PLE GR	43 46 27 N 25 57 33 S 38 02 50 N 38 02 50 N	142 21 50 028 14 53 023 51 45 023 51 45 023 51 45	113 1544 509 509	11 24 45.00 16 23 15.80 18 34 28.40 18 35 09.90 18 35 47.00	011 46 00 * 015 08 00 * 233 36 00 297 42 00 231 00 00	13 00 00 # 13 12 00 # 22 18 00 34 48 00 70 00 00	
ATHENS GR ATHNS PLE GR MADRIO SP PIC MIDI FR PIC MIDI FR	37 58 19 N 38 02 50 N 40 24 30 N 42 56 12 N 42 56 12 N	023 43 01 023 51 45 356 18 43 000 06 32 000 08 32	110 509 655 2862 2862	18 36 00.40 18 37 04.90 20 18 20.00 20 20 07.00 20 20 20.00	354 42 00 016 48 00 013 20 00 * 340 24 00 355 00 00	23 06 00 11 54 00 - 07 30 00 * 47 36 00 40 36 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 09 32	2862 2862 2962 2862 2862	20 20 55.50 20 21 04.50 20 21 13.50 20 21 23.00 20 21 36.00	015 42 00 018 12 00 020 18 00 022 54 00 024 00 00	23 36 00 21 24 00 19 00 00 15 46 00 14 24 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 06 32 000 08 32	2862 2862 2862 2862 2862	20 21 45.00 20 21 55.00 20 22 05.00 20 22 12.00 20 22 22.50	025 24 00 026 06 00 027 00 00 027 30 00 027 42 00	12 48 00 11 24 00 10 24 00 09 30 00 08 24 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 286 <b>2</b> 286 <b>2</b>	20 22 30.00 20 22 32.00 20 22 48.00 20 22 55.00 20 23 03.50	028 12 00 028 30 00 029 12 00 029 18 00 029 36 00	07 24 00 06 48 00 05 54 00 05 24 00 04 24 00	
PIC MIOI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 286 <b>2</b> 2862	20 23 12.00 20 23 22.50 20 23 31.00 20 23 40.50 20 23 48.50	029 48 00 030 00 00 030 06 00 030 18 00 030 24 00	03 54 00 03 18 00 02 42 00 02 12 00 01 36 00	
PIC MIOI FR PIC MIOI FR PIC MIDI FR PIC MIOI FR LAPLAT C ARG	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 34 54 26 5	000 08 32 000 08 32 000 08 32 000 08 32 302 05 30	2862 2862 2862 286 <b>2</b>	20 24 06.50 20 24 15.00 20 24 22.50 20 24 31.50 21 43 04.00	030 54 00 031 00 00 031 06 00 031 12 00 009 38 00 *	00 48 00 00 24 00 00 12 00 - 00 06 00 - 14 05 42 #	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 923 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103	22 12 46.50 22 13 04.10 22 13 13.00 22 13 21.60 22 13 30.40	030 48 00 038 24 00 042 24 00 044 54 00 047 36 00	34 54 00 31 06 00 29 42 00 27 48 00 26 12 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 13 39.00 22 13 48.30 22 14 05.30 22 14 13.90 22 14 22.50	049 36 00 051 36 00 055 00 00 056 24 00 057 54 00	24 36 00 23 18 00 20 54 00 19 36 00 18 24 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 14 31.40 22 14 40.10 22 14 57.10 22 15 11.30 22 15 28.90	058 54 00 060 06 00 061 54 00 063 18 00 064 42 00	17 24 00 16 24 00 14 42 00 13 18 00 11 42 00	

STATION	LATITUDE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			16 JLY 1958	(CONT)			
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN PUEBLA P MEX HUANCAYO PER	60 48 50 N 60 48 50 N 60 48 50 N 19 03 00 N 12 01 27 S	023 30 09 023 30 09 023 30 09 261 49 00 284 40 28	103 103 103 2200 3476	22 15 49.90 22 16 06.50 22 16 24.30 22 24 26.30 23 31 00.00	066 18 00 067 18 00 068 18 00 021 11 48 # 009 50 00 #	10 06 00 08 54 00 07 36 00 30 00 00 *	
HUANCAYO PER HUANCAYO PER GR TRK A BWI GR TRK A BWI GR TRK A BWI	12 01 27 S 12 01 27 S 21 25 59 N 21 25 59 N 21 25 59 N	284 40 28 284 40 28 288 51 16 288 51 16 288 51 16	3476 3476	23 32 00.00 23 33 00.00 23 40 45.00 23 40 50.00 23 40 55.00	010 10 00 # 010 22 00 # 083 49 48 077 54 54 073 00 54	09 36 00 * 18 30 00 * 32 13 12 30 18 10 20 24 00	
GR TRK A BWI GR TRK A BWI GR TRK A BWI GR TRK A BWI GR TRK A BWI	21 25 59 N 21 25 59 N	288 51 16 288 51 16 288 51 16 288 51 16 288 51 16		23 41 00.00 2: 41 05.00 23 41 10.00 23 41 15.00 23 41 20.00	068 50 06 065 08 06 062 00 00 059 01 30 052 31 12	26 45 28 24 55 30 23 22 30 21 44 42 20 21 18	e 6
GR TRK A BWI MIL RAD MASS THURSO SCOT JOKNN OB FIN JOKNN OB FIN	21 25 59 N 42 37 03 N 58 36 00 N 60 48 50 N 60 48 50 N	288 51 16 288 30 28 356 30 00 023 30 09 023 30 09	155 103 103	23 41 25.00 23 47 25.00 23 54 11.00 23 59 09.00 23 59 18.30	054 16 30 070 18 00 011 08 00 # 044 42 00 050 12 00	18 51 00 01 12 00 44 00 00 * 50 18 00 48 18 00	1679
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09	103 103 103 17 JLY 1958	23 59 30.70 23 59 36.60 23 59 53.50	058 48 00 061 18 00 068 42 00	45 18 00 43 42 00 39 36 00	
JOKNN OB FIN	60 48 50 N	023 30 09					
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	00 00 11.40 00 00 18.40 00 00 26.40 00 00 35.30 00 00 44.80	074 06 00 076 24 00 078 18 00 030 12 00 082 06 00	35 12 00 33 54 00 32 18 00 30 30 00 28 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN N ORLS AO LA	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 29 57 30 N	023 30 09 023 30 09 023 30 09 023 30 09 269 58 34	103 103 103 103 2	00 01 01.50 00 01 20.30 00 01 36.30 00 01 53.50 01 26 21.00	084 42 00 097 06 00 088 30 00 090 12 00 090 00 00	26 06 00 23 24 00 21 18 00 19 12 00 87 00 00	
ARLINGTON VA N CANTON A O WASHGTN A OC WASHGTN A OC PATERSON NJ	38 50 48 N 40 55 54 N 38 45 30 N 38 45 30 N 40 54 00 N	282 53 35 278 32 40 282 47 30 282 47 30 285 51 00	59 366 69 69	01 28 43.70 01 29 09.00 01 29 19.00 01 30 15.00 01 30 22.00	270 00 00 013 35 00 # 011 10 00 # 006 00 00 # 009 15 00 #	16 30 00 16 05 00 * 22 00 00 * 65 00 00 *	
MILLBROOK NY ST COLL PA MIL RAD MASS MIL RAD MASS MEUDON FR	41 51 30 N 40 44 01 N 42 37 03 N 42 37 03 N 48 48 18 N	285 22 33 282 06 33 288 30 28 288 30 28 002 13 52	243 393 155 155 162	01 30 42.00 01 30 49.00 01 31 00.00 01 32 22.00 01 46 00.60	010 24 00 * 000 00 00 314 48 00 357 24 00	47 00 00 * 43 55 00 * 24 00 00 18 06 00 11 48 00	699 984
MEUDON FR MEUDON FR MEUDON FR PIC MIDI FR PIC MIDI FR	48 48 18 N 48 48 18 N 48 48 18 N 42 56 12 N 42 56 12 N	002 13 52 002 13 52 002 13 52 000 08 32 000 08 32	162 162 162 2862 2862	01 46 25.90 01 46 59.40 01 47 26.40 01 49 45.50 01 50 21.00	050 18 00 055 07 00 060 44 00 064 43 00 065 36 00	12 46 00 11 58 00 10 46 00 09 41 00 00 54 00	
PIC MIDI FR . MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	42 56 12 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	000 08 32 002 13 52 002 13 52 002 13 52 002 13 52	2862 162 162 162 162	01 50 38.00 02 29 15.00 02 30 14.00 02 30 30.60 02 30 56.90	069 54 00 072 06 00 279 25 00 001 29 00 010 27 00	- 00 12 00 - 00 48 00 39 59 00 33 17 00 27 18 00	
MEUDON FR ALBUO S NM TEMPE ARIZ ALBUO-GS NM ALBUO D NM	48 48 18 N 35 03 18 N 33 25 00 N 35 06 22 N 35 03 00 N	002 13 52 253 23 30 248 06 00 253 23 14 253 23 00	152 1618 347 1565 1600	02 31 29.20 03 11 10.00 03 11 21.00 03 12 00.00 03 12 29.00	019 23 00 025 29 00 270 00 00 000 00 00 010 22 00 #	19 51 0D 14 06 00 18 00 00 30 0D 0D 24 06 00 #	. *
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 30 17.10 03 30 26.00 03 30 35.50 03 30 43.50 03 30 51.50	010 22 30 # 008 30 00 010 35 00 012 30 00 014 42 00	21 24 00 22 24 00 23 24 00 24 18 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 31 00.00 03 31 08.00 03 31 17.00 03 31 26.00 03 31 33.50	016 54 00 019 06 00 021 42 00 024 18 00 026 54 00 029 18 00	25 12 00 26 00 00 26 42 00 27 24 00 28 24 00 28 54 00	

STATION	LATITUDE	LONGITUDE EAST	HEIGHT IN METERS	T'ME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
		;	1T JLY 1958	(CONT)			
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 31 40.50 03 31 51.00 03 31 57.00 03 32 08.50 03 32 16.50	031 36 00 035 00 00 03T 12 00 040 54 0D 043 36 00	29 24 00 29 54 00 30 24 00 30 42 00 31 00 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 32 24.00 03 32 34.00 03 32 41.00 03 32 48.50 03 32 59.00	046 12 00 049 36 00 051 48 D0 054 54 00 058 24 00	31 12 00 31 24 00 31 24 00 31 24 00 31 24 00	•
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 06 32	2362 2862 2862 2862 2862	03 33 06.50 03 33 15.50 03 33 23.50 03 33 33.00 03 33 41.00	060 30 00 063 06 00 065 54 00 068 42 00 071 00 00	31 12 00 31 00 00 30 36 00 30 24 00 29 54 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 33 50.50 03 33 59.50 03 34 07.00 03 34 15.00 03 34 25.50	073 36 00 076 00 00 07T 54 00 079 06 00 082 12 00	29 24 00 29 00 00 28 24 00 27 54 00 27 18 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 06 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2362 2852	03 34 33.50 03 34 39.50 03 34 51.50 03 35 00.00 03 35 08.00	083 54 00 085 06 00 08T 30 00 089 18 00 090 42 00	26 42 00 26 12 00 25 24 00 24 36 00 24 12 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2062 2062	03 35 15 50 03 35 24 650 03 35 35 650 03 35 44 650 03 35 51 600	091 54 00 093 30 00 095 18 00 095 48 00 097 30 00	23 30 00 23 00 00 22 12 00 21 24 00 21 00 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 06 32 000 06 32	2862 2862 2862 2862 2062	03 35 59.00 03 36 07.00 03 36 15.50 03 36 27.00 03 36 34.50	098 36 00 099 42 00 100 48 00 102 06 00 102 54 00	20 24 00 20 00 00 19 24 00 18 24 00 18 00 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2362 2862 2962 2962 2862	03 36 44.50 03 36 52.50 03 37 02.00 03 37 07.50 03 37 19.50	103 54 00 104 48 00 105 36 00 106 18 00 10T 18 00	1T 24 00 16 36 00 15 54 00 15 36 00 14 54 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 06 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 37 26.00 03 37 35.50 03 37 43.00 03 37 52.00 03 38 19.50	108 00 00 108 42 00 109 12 00 109 36 00 112 00 00	14 24 00 14 00 00 13 24 00 12 54 00 11 24 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2362 2862 2862	03 38 25.00 03 38 36.00 03 38 44.00 03 38 53.00 03 39 02.00	112 18 00° 113 00 00 113 24 00 114 06 00 114 36 00	11 00 00 10 24 00 10 06 00 09 36 00 09 00 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 39 11.00 U3 39 20.50 U3 39 28.00 03 39 38.50 03 39 45.50	115 12 00 115 42 00 116 18 00 116 36 00 116 54 00	08 36 00 08 12 00 07 48 00 0T 24 00 07 00 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 C8 32 000 08 32 000 08 32 000 03 32 000 08 32	2862 2862 2862 2862 2862	03 39 54.00 03 40 04.50 03 40 12.50 03 40 22.00 03 40 30.50	11T 24 00 11T 54 00 118 06 00 118 36 00 119 00 00	05 30 00 06 00 00 05 24 00 05 06 00 04 36 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 40 41.50 03 40 49.00 03 41 04.50 03 41 14.50 03 41 23.00	119 18 00 119 42 00 120 24 00 120 48 00 121 00 00	04 24 00 04 00 00 03 24 00 02 54 00 02 36 00	i
PIC MIDI FR PIC MIDI FR PIC MIDI FR WLNTCK A CAL PORTLAND ORE	37 55 30 N		10	03 41 31.00 03 41 40.50 03 41 48.00 04 57 32.00 04 59 35.00	121 36 00 121 54 00 008 13 00		

STATION	LATITUDE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			17 JLY 195	8 (CONT)			
OK CY A OKLA ATHENS GR ATHENS GR KASHIWABRA J KASHIWABRA J	35 33 50 N 37 58 19 N 37 58 19 N 34 30 24 N 34 30 24 N	262 29 20 023 43 01 023 43 01 135 48 15 135 48 15	360 110 110 66 66	10 28 24.00 18 43 25.60 18 44 24.60 19 08 00.00 19 08 10.00	045 00 00 305 48 00 334 12 00 004 58 00 * 004 55 00 *	31 00 00 13 42 00 12 06 00 47 00 00 * 44 00 00 *	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	20 27 12.50 20 27 23.00 20 27 30.00 20 27 39.00 20 27 46.50	267 06 00 272 18 00 276 06 00 281 36 00 286 30 00	14 30 00 15 24 00 16 48 00 18 02 00 19 12 00	
PIC MIOI FR PIC MIOI FR PIC MIDI FR PIC MIOI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2962 2962 2862	20 27 55.50 20 28 03.00 20 28 12.50 20 28 22.00 20 28 29.00	293 12 00 298 54 00 305 54 00 314 00 00 320 18 00	19 54 00 20 42 00 21 18 00 21 24 00 21 18 00	
PIC MIDI FR AGEN FRANCE PIC MIOI FR PIC MIDI FR PIC MIOI FR	42 56 12 N 44 10 36 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 35 42 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862	20 28 38.00 20 28 40.00 20 28 45.50 20 28 55.00 20 29 03.50	326 48 00 314 12 00 331 54 00 338 24 00 343 30 00	20 36 00 24 48 00 19 54 00 19 00 00 17 48 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	20 29 12.50 20 29 19.00 20 29 27.00 20 29 36.00 20 29 44.00	347 54 00 351 00 00 354 30 00 357 54 00 000 30 00	16 48 00 16 00 00 14 30 00 13 36 00 12 36 00	
PIC MIOI FR AGEN FRANCE PIC MIDI FR PIC MIOI FR PIC MIDI FR	42 56 12 N 44 10 36 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 35 42 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862	20 29 52.50 20 30 00.00 20 30 02.00 20 30 11.00 20 30 18.50	003 12 00 003 00 00 007 00 00 008 00 00 009 24 00	11 42 00 12 00 00 10 42 00 10 06 00 09 18 00	
PIC MIDI FR PIC MIOI FR PIC MIOI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	20 30 26•00 20 30 35•00 20 30 44•00 20 30 53•00 20 31 02•50	011 00 00 012 36 00 014 00 00 015 24 00 016 48 00	08 24 00 07 30 00 06 48 00 06 12 00 05 24 00	
PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2962 2862	20 31 11.50 20 31 21.00 20 31 34.50 20 31 39.00 20 31 46.00	017 54 00 018 54 00 020 00 00 020 36 00 021 24 00	04 42 00 04 18 00 03 24 00 03 06 00 02 36 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N	000 06 32 000 06 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	20 31 54.50 20 32 05.00 20 32 14.50 20 32 23.00 20 32 31.50	021 42 00 022 54 00 023 30 00 024 00 00 024 48 00	02 06 00 01 24 00 01 00 00 00 30 00 00 06 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 32 39.00	025 06 00	- 00 12 00	
CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	18 JLY 1 24 24 24 24 24 24	01 37 45.60 01 37 49.00 01 37 50.30 01 37 59.30 01 38 09.30	281 36 00 284 48 00 285 36 00 288 12 00 292 18 00	04 18 00 04 30 00 04 36 00 07 00 00 07 24 00	
CAMERDG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 286 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	01 38 12.00 01 38 42.90 01 38 52.40 01 39 30.50 01 39 39.40	295 18 00 306 18 00 307 06 00 322 42 00 326 42 00	07 48 00 07 30 00 07 54 00 09 30 00 09 00 00	
CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	01 39 47.80 01 40 05.20 01 40 13.60 01 40 14.50 01 40 21.50	329 42 00 328 54 00 341 30 00 331 54 00 343 30 00	08 42 00 10 48 00 08 42 00 10 36 00 08 36 00	
CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	24 24	01 40 30.80 01 40 39.60 01 40 40.50 01 40 48.40 01 40 51.30		08 24 00 07 54 00 05 18 00 05 30 00 05 42 00	
MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N	002 13 52 002 13 52		01 52 52.60 01 54 12.00		18 44 00 17 25 00	

STATION	LATITUDE	LONGI TUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR OECLINATION#	SLANT RANGE IN KM
			18 JLY 1958	(CONT)			
MEUDON FR	48 48 18 N	002 13 52	162	01 54 54.90	061 38 00	15 48 00	
MEUDON FR	48 48 18 N	002 13 52	162	01 55 21.60	066 23 00	14 30 00	
MEUDON FR	48 48 18 N	002 13 52	162	01 55 46.20	070 23 00	13 33 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	01 56 04.00	058 00 00	07 06 00	
MEUDON FR	48 48 18 N	002 13 52	162	01 56 04.50	073 05 00	12 35 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	01 56 18.00	060 24 00	06 42 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	01 56 27.50	061 36 00	06 30 00	
MEUDON FR	48 48 18 N	002 13 52	162	01 56 30.40	076 28 00	11 20 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	01 56 36.50	062 42 00	06 18 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	01 56 45.50	063 48 00	06 06 00	
MEUOON FR PIC MIDI FR PIC MIDI FR MEUOON FR PIC MIOI FR	49 48 18 N 42 56 12 N 42 56 12 N 48 48 18 N 42 56 12 N	002 13 52 000 08 32 000 08 32 002 13 52 000 03 32	162 2862 2862 162 2862	01 56 47.20 01 56 53.50 01 57 02.00 01 57 05.50 01 57 17.50	078 33 00 065 00 00 065 54 00 080 33 00 067 06 00	10 27 00 05 54 00 05 42 00 09 47 00 05 18 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	01 57 21.00	068 06 00	05 12 00	
MEUOON FR	48 48 18 N	002 13 52	162	01 57 21.60	082 14 00	08 45 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	01 57 29.50	069 06 00	05 00 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	01 57 40.50	070 18 00	04 36 00	
PIC MIDI FR	42 56 12 N	000 09 32	2862	01 57 48.00	070 48 00	04 24 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	01 57 56.00	071 48 00	04 12 00	
MEUDON FR	48 48 18 N	002 13 52	162	01 58 04.50	086 06 00	06 48 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	01 58 05.00	072 42 00	03 48 00	
PIC MIDI FR	42 56 12 N	000 09 32	2862	01 58 16.00	073 42 00	03 30 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	01 58 24.00	074 30 00	03 12 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR MEUOON FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 48 48 18 N 42 56 12 N	000 08 32 000 08 32 000 08 32 002 13 52 000 08 32	2862 2862 2862 162 2862	01 58 37.50 01 58 48.00 01 58 56.00 01 58 56.90 01 59 04.50	075 54 00 076 36 00 077 18 00 090 13 00 078 12 00	02 48 00 02 30 00 02 12 00 04 54 00 02 00 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	01 59 21.50 01 59 31.00 01 59 39.50 01 59 57.00 02 00 16.00	079 36 00 080 30 00 080 48 00 082 18 00 083 30 00	01 30 00 01 18 00 01 00 00 00 24 00 - 00 12 00	
PIC MIDI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	02 00 24.00 02 00 35.50 03 37 27.00 03 37 37.50 03 37 44.50	084 12 00 084 24 00 348 00 00 349 36 00 350 30 00	- 00 24 00 - 00 36 00 17 42 00 18 54 00 20 18 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 37 53.50	351 48 00	21 24 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 38 00.00	353 00 00	22 24 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 38 09.50	354 18 00	25 48 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 38 17.50	356 00 00	25 06 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 38 26.50	357 48 00	26 24 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 38 37.00	359 48 00	28 00 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	03 38 46.00	002 06 90	29 24 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	03 38 52.00	003 18 00	30 24 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 39 01.00	005 48 00	31 54 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 39 09.00	007 54 00	33 18 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 39 20 • 00	011 12 00	36 06 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 39 30 • 00	014 36 00	36 24 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 39 38 • 00	017 30 00	37 48 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 39 45 • 50	020 06 00	38 42 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 39 53 • 00	023 06 00	39 42 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 40 02.50	027 00 00	41 18 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 40 11.00	030 54 00	42 12 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 40 27.00	035 36 00	43 12 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 40 35.50	042 30 00	44 06 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 40 45.50	047 00 00	44 24 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	03 40 52.50	050 18 00	44 30 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	03 41 02.00	055 06 00	44 30 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	03 41 10.00	059 06 00	44 30 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	03 41 18.00	061 30 00	44 18 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	03 41 26.00	066 24 00	44 00 00	
PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862	03 41 36.50 03 41 44.00 03 41 52.50 03 42 01.50 03 42 08.50	070 48 00 074 00 00 077 30 00 081 42 00 084 06.00	43 18 00 42 36 00 41 54 00 41 06 00 40 24 00	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION	SLANT RANGE IN KM
			18 JLY 1958	(CONT)			
PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 42 18 00 03 42 26 50 03 42 35 50 03 42 45 00 03 42 55 50	087 18 00 089 54 00 092 24 00 095 00 00 097 30 00	39 24 00 38 24 00 37 18 00 36 18 00 35 06 00	
PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 43 02*50 03 43 12*50 03 43 29*50 03 43 37*50 03 43 46*50	097 54 00 100 06 00 103 18 00 104 36 00 106 18 00	34 12 00 33 12 00 31 06 00 30 18 00 29 12 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 44 03.00 03 44 11.50 03 44 19.00 03 44 28.00 03 44 36.50	108 30 00 109 48 00 110 30 00 111 42 00 112 36 00	27 24 00 26 30 00 25 36 00 24 42 00 24 00 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 44 47.00 03 44 56.50 03 45 06.50 03 45 14.50 03 45 22.50	113 36 00 114 36 00 115 30 00 116 12 00 116 48 00	23 12 00 22 18 00 21 18 00 20 30 00 19 54 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 45 29.00 03 45 37.50 03 45 44.50 03 45 53.00 03 46 01.00	117 24 00 118 00 00 118 48 00 119 12 00 119 48 00	19 24 00 18 42 00 18 12 00 17 24 00 17 06 00	
PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 46 10.00 03 46 20.00 03 46 30.50 03 46 40.00 03 46 56.50	120 18 00 . 121 00 00 . 121 30 00 . 122 06 00 .	16 18 00 15 30 00 14 42 00 14 00 00 13 12 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 C6 32 000 08 32 000 08 32 000 C6 32 000 C8 32	2862 2862 2862 2862 2862	03 47 05.00 03 47 13.50 03 47 23.50 03 47 31.50 03 47 44.00	123 24 00 123 42 00 124 18 00 124 36 00 124 48 00	12 30 00 12 00 00 11 24 00 10 54 00 10 24 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862 2662	03 47 49.00 03 47 58.00 03 48 05.00 03 48 17.00 03 48 25.00	125 24 00 125 42 00 126 00 00 126 18 00 126 36 00	10 00 00 09 24 00 09 06 00 08 24 00 07 54 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 48 35.00 03 48 41.00 03 48 50.50 03 49 00.50 03 49 17.50	127 00 00 127 06 00 127 30 00 127 54 00 128 18 00	07 24 00 06 54 00 06 24 00 06 12 00 05 18 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	03 49 27.50 03 49 42.50 03 49 53.00 03 50 01.50 03 50 18.00	128 54 00 129 06 00 129 12 00 129 42 00 130 00 00	04 36 00 04 00 00 03 24 00 03 06 00 02 24 00	
PIC MIDI FR HGSHMTSYMA J OK CY A OKLA OK CY A OKLA WICHITA KAN	42 56 12 N 36 02 22 N 35 33 50 N 35 33 50 N 37 41 44 N	000 08 32 139 23 54 262 29 20 262 29 20 262 45 19	31 360 360	03 50 27.50 10 12 13.00 10 34 05.00 10 36 36.00 10 38 00.20	012 11 00 * 000 00 045 00 00	01 54 00 - 08 00 00 25 30 00 47 00 00 45 42 00	•
FT WTH C TEX CHIN LAK CAL MIYAZAKI J KONKO J MIYAZAKI J	32 42 15 N 35 39 25 N 31 55 23 N 34 32 31 N 31 55 23 N	262 37 30 242 20 13 131 25 24 133 37 40 131 25 24	701 8 4	10 40 23.00 13 18 54.50 19 15 00.00 19 15 33.00 19 16 D9.00	270 00 00 004 08 00 # 090 00 00	82 00 00 40 00 00 47 00 00	•
COPNGN U DEN MEUOON FR MEUOON FR MEUOON FR BERLN SG GER	55 41 12 N 48 48 18 N 48 48 18 N 48 48 18 N 52 28 3D N	002 13 52 002 13 52 002 13 52	162 162 162	20 38 33.30 20 38 34.90 20 39 19.70 20 39 44.20 20 39 56.10	000 25 00 014 08 00 018 59 00	26 00 00 17 52 00 12 24 00 09 58 00 19 54 DD	
BERLN SG GER CHELMSFD ENG COPNGN A DEN COPNGN A DEN	52 28 3D N 51 43 DD N 55 44 41 N 55 44 41 N	000 30 00 012 33 09		2D 40 23.10 22 26 17.00 22 26 34.04 22 27 27.04	005 10 00 4	17 48 00 47 00 00 51 36 00	:

STATION	LATITUDE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			19 JLY 195	8			
MEUDON FR MEUDON FR ORFONESS ENG MEUDON FR ORFDNESS ENG	48 48 18 N 48 48 18 N 52 06 00 N 48 48 18 N 52 06 00 N	002 13 52 002 13 52 001 36 00 002 13 52 001 36 00	162 162 162	02 00 46.40 02 01 04.40 02 01 13.00 02 01 28.80 02 01 40.00	036 30 00 042 07 00 057 12 00 049 30 00 063 06 00	24 49 00 24 28 00 25 00 00 24 00 00 27 06 00	
MEUDON FR MEUDON FR ORFONESS ENG MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 52 06 00 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 001 36 00 002 13 52 002 13 52	162 162 162	02 01 47.60 02 02 02.90 02 02 03.00 02 02 21.60 02 02 38.20	054 47 00 058 50 00 069 30 00 063 24 00 067 11 00	23 26 00 22 48 00 24 00 00 21 55 00 21 03 00	
MEUDON FR ORFONESS ENG MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 52 06 00 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 001 36 00 002 13 52 002 13 52 002 13 52	162 162 162 162	02 02 56.50 02 03 04.00 02 03 13.20 02 03 46.30 02 04 04.80	070 46 00 080 12 00 073 58 00 079 30 00 082 11 00	20 01 00 21 00 00 19 06 00 16 57 00 15 50 00	·
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	02 04 23.10 02 04 41.00 02 04 56.80 02 05 14.30 02 05 32.00	084 34 00 086 46 00 038 30 00 090 18 00 091 41 00	14 42 00 13 37 00 12 42 00 11 47 00 10 47 00	
MEUOON FR MEUDON FR MEUDON FR MEUOON FR PRET BS AF	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 25 43 43 S	002 13 52 002 13 52 002 13 52 002 13 52 028 12 42	162 162 162 162 1311	02 05 48.90 02 06 15.40 02 06 49.70 02 07 25.00 04 11 08.20	093 24 00 095 28 00 097 52 00 100 05 00 003 25 06 #	09 50 00 08 26 00 06 38 00 05 03 00 09 48 00 #	
UNION JOHSBG OLFSFTN S AF OLFSFTN S AF JOHBG C S AF JOHBG E S AF	26 10 55 S 25 57 33 S 25 57 33 S 26 07 00 S 26 08 00 S	028 04 30 028 14 53 028 14 53 028 00 00 028 01 00	1806 1544 1544 1615 1672	04 11 09.00 04 11 43.81 04 13 14.30 04 15 03.00 04 16 04.50	003 26 00 # 003 32 00 # 004 09 36 # 005 00 00 # 005 32 30 #	11 30 00 # 04 30 00 # = 11 32 00 # = 28 00 00 # = 34 06 00 #	
UNION JOHSAG CLEVELND A O SPOKN A WASH SACMTO E CAL OK CY A OKLA	26 10 55 S 41 29 46 N 47 37 37 N 38 32 55 N 35 33 50 N	029 04 30 278 12 16 242 38 59 238 14 51 262 29 20	1806 220 706 15 360	04 16 07.00 09 00 02.00 10 39 04.00 10 41 58.00 10 44 29.00	005 35 00 * 088 00 00 045 00 00 004 46 27 * 045 00 00	- 34 48 00 * 40 00 00 38 30 00 32 28 00 * 66 00 00	
OK CY A OKLA FT WTH C TEX BILOXI MISS MIYAZAKI J MIYAZAKI J	35 33 50 N 32 42 15 N 30 23 27 N 31 55 23 N 31 55 23 N	262 29 20 262 37 30 271 08 28 131 25 24 131 25 24	360 204 7 8 8	10 45 22.00 10 46 19.00 10 47 06.00 19 21 35.00 19 22 31.40	090 00 00 000 30 30 * 270 00 00 002 55 00 * 002 44 00 *	64 00 00 30 25 00 # 85 00 00 56 00 00 # 37 48 00 #	
YATSUSHIRO J BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	32 30 21 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	130 36 15 013 20 30 013 20 30 013 20 30 013 20 30	3 50 50 50 50	19 22 58.00 20 46 31.10 20 46 56.70 20 47 14.20 20 47 55.20	090 00 00 324 54 18 336 48 18 344 24 18 000 54 18	43 00 00 15 54 00 16 06 00 15 54 00 14 12 00	
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30 013 20 30 013 20 30	50 50 50 50 50	20 48 15.20 20 48 33.00 20 48 49.20 20 49 18.20 20 49 36.20	008 00 18 004 20 00 * 017 06 18 003 32 00 * 003 03 00 *	12 12 00 48 00 00 * 10 12 00 42 00 00 * 41 00 00 *	
			20 JLY 1	958			
NANCY FRANCE MEUOON FR MEUDON FR MEUOON FR MEUDON FR	48 41 54 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	006 13 30 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162	02 08 57.00 02 10 40.60 02 11 15.20 02 11 39.40 02 11 58.20	047 12 00 085 07 00 090 37 00 093 45 00 095 59 00	39 30 00 22 56 00 20 12 00 18 24 00 16 58 00	
MEUDON FR MEUOON FR FT WTH A TEX MLWKEE B WIS MLWKEE A WIS	48 48 18 N 48 48 18 N 32 42 27 N 42 59 25 N 42 58 07 N	002 13 52 002 13 52 262 38 14 272 01 15 271 51 05	162 162 182 29+	02 12 24.80 02 12 51.00 05 23 06.00 09 02 24.60 09 04 45.00	098 33 00 091 01 00 000 42 00 * 010 30 00 * 003 05 00 *		
ROANOKE VA ST COLL PA FT BELVR VA N CANTON A O BRISTOL TENN	37 19 00 N 40 44 01 N 38 45 30 N 40 55 54 N 36 35 03 N	280 04 00 282 06 33 282 48 42 278 32 40 277 50 31	343 393 85 366 527	09 05 15.00 09 05 38.00 09 05 53.00 09 07 03.30 09 08 08.00	023 05 10 # 000 00 00 000 00 00 002 04 54 # 090 00 00	69 00 00 63 00 00	
WPALMB A FLA S ANT A TEX SPOKN A WASH	29 27 48 N	279 55 20 261 30 56 242 38 59	5 256 706	09 11 38.00 10 31 36.00 10 46 11.00		35 00 00 51 30 00 54 30 00	

				4			
STATION	LATITUOE	LONG I TUDE EAST	HEIGHT IN METERS	TIME GHT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	So RAI IN
						- CELLINATION -	114
DENVR A COLO	39 44 52 N	255 00 27	20 JLY 195				
ALMGROO A NM ALBUO-GS NM FT WTH N TEX FT WTH C TEX	32 52 24 N 35 06 22 N 32 44 40 N 32 42 15 N	255 03 24 254 02 58 253 23 14 262 37 54 262 37 30	1625 1335 1565 186 204	10 47 00.00 10 49 49.00 10 50 00.00 10 52 14.00 10 52 36.00	341 36 00 003 53 00 # 003 02 00 # 024 12 00 # 000 42 00 #	31 30 00 65 50 00 # 50 18 00 # 51 00 00 # 34 00 00 #	
S ANT A TEX FUKUOKA 1 J FUKUOKA 1 J MIYAZAKI J KAGOSHIMA J	29 27 48 N 33 37 25 N 33 37 25 N 31 55 23 N 31 31 34 N	261 30 56 130 25 40 130 25 40 131 25 24 130 31 47	256 16 16 8 . 13	10 53 48 00 15 32 02 00 19 22 58 00 19 27 58 00 19 30 38 00	090 00 00 135 00 00 090 00 00 000 01 00 #	69 30 00 43 00 00 43 00 00 57 00 00 *	
YATSUSHIRO J JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	32 30 21 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	130 36 15 023 30 09 023 30 09 023 30 09 023 30 09	3 103 103 103 103	19 32 02.00 22 41 46.30 22 42 04.30 22 42 19.30 22 42 30.50	135 00 00 346 54 00 002 00 00 015 36 00 025 54 00	99 00 00 # 43 00 00 46 18 00 47 18 00 48 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	6C 48 50 N 6O 48 50 N 6O 48 50 N 6O 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 42 46 • 20 22 42 56 • 50 22 43 13 • 30 22 43 22 • 50 22 43 31 • 60	038 06 00 044 48 00 054 12 00 058 18 00 062 06 00	47 36 00 45 36 00 43 48 00 40 18 00 38 18 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103	22 43 48 20 22 44 20 70 22 44 40 60 22 45 15 70	067 18 00 074 54 00 078 12 00 082 30 00	36 18 CO 33 OO OO 27 18 OO 24 12 OO	•
			21 JLY 195		30 00	19 48 00	
SHIRAZ IRAN SHIRAZ IRAN AGEN FRANCE ATHNS PLE GR ATHNS PLE GR	29 38 40 N 29 38 40 N 44 10 36 N 38 02 50 N 38 02 50 N	052 31 33 052 31 33 000 35 42 023 51 45 023 51 45	1600 1600 509 509	00 41 17.87 00 41 33.00 02 11 45.00 02 18 08.40 02 19 01.40	002 15 00 # 002 17 04 # 353 06 00 340 36 00 350 18 00	07 33 00 * - 09 37 30 * 16 18 00 25 54 00	
ATHNS PLE GR ATHNS PLE GR ATHNS PLE GR ATHNS PLE GR ATHNS PLE GR	38 O2 50 N 38 O2 50 N 38 O2 50 N 38 O2 50 N 38 O2 50 N	023 51 45 023 51 45 023 51 45 023 51 45 023 51 45	509 509 509 509 509	02 21 17.40 02 22 10.40 02 23 03.40 02 24 12.40 02 25 24.40	133 12 00 139 48 00 142 18 00 145 24 00 146 00 00	62 48 00 62 18 00 41 54 00 37 54 00 28 48 00 21 00 00	
S FERNNOO SP MLWKEE 8 WIS CAMBROG MASS CAMBROG MASS CAMBROG MASS	36 27 42 N 42 59 25 N 42 22 47 N 42 22 47 N 42 22 47 N	353 47 42 272 01 15 286 52 14 288 52 14 288 52 14	30 24 24 24	04 03 44.33 07 26 50.00 07 27 09.00 07 27 13.20 07 27 28.20	002 07 54 # 003 53 00 # 058 54 00 061 06 00 066 00 00	37 28 00 # 24 00 00 # 35 54 00 35 36 00 35 00 00	
CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 283 52 14 288 52 14	24 24 24 24 24	07 27 35.00 07 27 43.00 07 27 47.00 07 27 59.00 07 28 05.00	058 24 00 058 42 00 071 06 00 073 30 00 075 48 00	34 48 00 34 06 00 33 36 00 33 06 00	
CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	289 52 14 288 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	07 28 07.00 07 28 45.00 07 28 50.60 07 29 00.30 07 29 26.00	077 36 00 085 48 00 089 00 00 091 18 00 094 00 00	32 18 00 32 00 00 30 00 00 28 42 00 27 42 00	
CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	07 30 10.00 07 30 26.60 07 31 11.60 07 31 28.00 07 31 51.00	099 48 00 101 12 00 105 30 00 107 06 00 109 42 00	26 42 00 23 48 00 23 00 00 20 30 00 19 00 00	
AMES A IOWA MLWKEE B WIS WPALMB A FLA CHI CPLN ILL MLWKEE A WIS	42 01 59 N 42 59 25 N 26 39 30 N 41 51 58 N 42 58 07 N	266 22 00 272 01 15 279 55 20 272 23 35 271 51 05	305 5 194 294	09 09 18 00 09 09 34 00 09 11 00 09 09 11 19 30 09 11 49 00	020 00 00 022 40 00 # 090 00 00 001 45 09 #	38 42 00 82 30 00 # 35 00 00 50 16 30 #	
MLWKEE A WIS GR TRK A BWI GR TRK A BWI GR TRK A BWI GR TRK A BWI	42 58 07 N 21 25 59 N 21 25 59 N 21 25 59 N 21 25 59 N	271 51 05 288 51 16 288 51 16 288 51 16 288 51 16	294	09 12 43 00 09 14 30 00 09 15 00 00 09 15 30 00 09 16 00 00	095 54 00 001 55 00 # 341 01 48 341 45 36 342 28 48	57 40 00 15 00 00 * 25 25 12 29 43 12 34 52 12	:
WPALM8-A FLA GR TRK A 8WI WPALM8-A FLA WPALM8-A FLA GR TRK A 8W:	26 39 30 N 21 25 59 N 26 39 30 N 26 39 30 N 21 25 59 N	279 55 20 288 51 16 279 55 20 279 55 20 288 51 16	5 5 5	09 16 27.75 09 16 30.00 09 16 43.75 09 16 59.75 09 17 00.00	343 49 12 002 34 12 * 345 19 12 002 35 42 * 002 37 00 * 347 39 36	. 40 33 00 12 18 00 * 46 49 12 27 49 00 * 23 31 00 * 54 28 12	

STATION	LATITUOE		HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
		2	1 JLY 1958	(CONT)			
WPALMB A FLA GR TRK A BWI GR TRK A BWI GR TRK A BWI GR TRK A BWI	26 39 30 N 21 25 59 N 21 25 59 N 21 25 59 N 21 25 59 N	279 55 20 288 51 16 288 51 16 288 51 16 288 51 16	5	09 17 20.00 09 17 30.00 09 18 00.00 09 18 30.00 09 19 00.00	090 00 00 351 31 12 359 21 36 018 07 12 072 22 48	61 00 00 62 18 00 70 43 12 79 03 00 82 11 24	
GR TRK A BWI GR TRK A BWI GR TRK A BWI GR TRK A BWI GR TRK A BWI	21 25 59 N 21 25 59 N 21 25 59 N 21 25 59 N 21 25 59 N	288 51 16 288 51 16 288 51 16 288 51 16 288 51 16		09 19 30.00 09 20 00.00 09 20 30.00 09 21 00.00 09 21 30.00	117 37 12 132 33 00 140 14 24 144 00 00 149 37 12	76 55 12 69 36 36 60 36 36 55 23 24 49 38 24	
GR TRK A BWI GR TRK A BWI GR TRK A BWI SPOKN A WASH OENVR A COLO	21 25 59 N 21 25 59 N 21 25 59 N 47 37 37 N 39 44 52 N	288 51 16 288 51 16 288 51 16 242 38 59 255 03 24	706 1625	09 22 00.00 09 22 30.00 09 24 00.00 10 52 39.00 10 54 25.00	148 14 24 149 39 36 152 14 24 045 00 00 321 00 00	44 26 24 39 45 36 28 48 00 70 30 00 50 00 00	•
ALMGOO-GS+NM ALBUO-GS NM ALBUO S NM ALMGOO-GS+NM FT WTH A TEX	32 52 22 N 35 06 22 N 35 03 18 N 32 52 22 N 32 42 27 N	254 03 05 253 23 14 253 23 30 254 03 05 262 38 14	1339 1565 1618 1339 182	10 54 47.00 10 57 00.00 10 57 24.00 10 58 05.00 10 58 26.50	018 00 00 # 000 40 00 # 090 00 00 001 39 00 # 022 37 00 #	80 34 00 * 56 00 00 * 69 00 00 35 55 00 * 30 00 00 *	
ALBUO-GS NM S ANT B TEX S ANT A TEX PUEBLA P MEX MAUI HAWAII	35 06 22 N 29 27 34 M 29 27 48 N 19 03 00 N 20 42 36 N	253 23 14 261 29 16 261 30 56 261 49 00 203 44 23	1565 256 2200 3048	10 59 00.00 10 59 34.50 10 59 34.50 11 04 16.00 14 26 44.00	001 47 00 # 270 00 00 270 00 00 001 50 00 # 002 41 30 #	- 10 36 00 * 83 00 00 82 00 00 10 00 00 * 50 38 00 *	
MAUI HAWAII MAUH HUMM MAUH HAWAII MAUH HUMM MAUH HUMM	20 42 36 N 20 42 36 N 20 42 36 N 20 42 36 N 20 42 36 N	203 44 23 203 44 23 203 44 23 203 44 23 203 44 23	3048 3048 3048 3048 3048	14 26 52.00 14 27 00.30 14 34 37.00 14 35 00.00 14 35 09.00	002 42 12 * 002 43 24 * 003 09 00 * 003 09 00 * 003 09 00 *	48 33 00 * 46 28 00 * 50 35 00 * 45 07 00 * 43 17 00 *	
MIYAZAKI J YATSUSHIRO J KAGOSHIMA J KAGOSHIMA J MIYAZAKI J	31 55 23 N 32 30 21 N 31 31 34 N 31 31 34 N 31 55 23 N	131 25 24 130 36 15 130 31 47 130 31 47 131 25 24	8 3 13 13	19 30 51.00 19 34 47.00 19 35 08.00 19 35 56.00 19 36 11.00	017 28 00 * 270 00 00 023 36 00 * 000 05 00 * 000 01 00 *	58 00 00 * 76 00 00 29 00 00 * 15 00 00 *	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 02 05.90 21 02 13.70 21 02 22.30 21 02 30.50 21 02 37.90	007 30 00 013 30 00 019 42 00 025 18 00 029 18 00	41 12 00 39 54 00 38 30 00 37 06 00 35 36 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 02 47.30 21 02 56.70 21 03 05.60 21 03 13.50 21 03 22.70	033 54 00 038 24 00 041 54 00 044 30 00 047 12 00	33 36 00 31 54 00 30 12 00 28 48 00 27 06 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 03 46.70 21 03 56.10 21 04 04.90 21 04 13.80 21 04 23.80	053 00 00 054 00 00 056 00 00 057 00 00 059 00 00	23 06 00 21 54 00 20 36 00 19 24 00 18 12 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 04 50.50 21 05 06.00 21 05 16.50 21 05 24.90 21 05 34.20	062 24 00 063 06 00 064 30 00 065 12 00 065 48 00	15 42 00 14 12 00 12 54 00 12 06 00 11 30 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 05 43.30 21 05 51.20 21 05 59.00 21 06 08.60 21 06 16.70	067 30 00 068 06 00	10 42 00 10 06 00 09 30 00 08 48 00 08 12 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103 103 103 103	21 06 27.00 21 06 34.80 21 06 44.50 21 06 52.20 21 07 00.90	069 24 00 069 54 00 070 06 00	07 36 00 07 06 00 06 24 00 06 00 00 05 30 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 07 09.60 21 07 18.50 21 07 27.50 21 07 36.30 21 07 44.50	071 18 00 071 36 00 071 54 00	05 00 00 04 30 00 04 00 00 03 30 00 03 12 00	

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STATION	LATITUDE	LONGI TUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			21 JLY 1958	(CONT)			
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 18 54.30 22 47 14.10 22 47 30.70 22 47 47.30 22 47 56.30	046 30 00 324 48 00 333 24 00 343 06 00 350 06 00	50 36 00 36 00 00 41 06 00 47 18 00 49 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 48 05.10 22 48 13.30 22 48 37.30 22 48 46.50 22 48 54.30	358 36 00 006 30 00 031 54 00 040 06 00 046 30 00	52 12 00 53 12 00 53 24 00 52 06 00 50 36 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 49 01.90 22 49 08.70 22 49 14.50 22 49 21.30 22 49 29.10	052 12 00 057 00 00 060 00 00 063 24 00 066 48 00	48 54 00 47 12 00 46 00 00 44 18 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 49 35.70 22 49 47.10 22 49 55.10 22 50 02.30 22 50 12.10	069 42 00 073 42 00 076 12 00 077 42 00 080 00 00	42 30 00 40 36 00 37 54 00 36 00 00 34 24 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 50 22•10 22 50 30•10 22 50 37•20 22 50 46•70 22 50 56•90	082 00 00 083 24 00 084 30 00 085 54 00 087 12 00	32 36 00 30 42 00 29 12 00 27 54 00 26 30 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 51 05.50 22 51 14.10 22 51 22.90 22 51 31.10 22 51 39.70	088 06 00 089 00 00 089 54 00 090 36 00 091 18 00	24 54 00 23 42 00 22 36 00 21 30 00 20 30 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 51 48.70 22 51 57.70 22 52 06.50 22 52 14.70 22 52 23.90	092 00 00 092 30 00 093 06 00 093 42 00 094 12 00	19 30 00 18 30 00 17 36 00 16 42 00 16 00 00	
JOKNN OB EIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	22 52 32.30	094 36 00	15 12 00 14 24 00	
			22 JLY 1958	22 52 41.10	095 06 00	13 42 00	
MEUOON FR MEUOON FR MEUDON FR MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	02 20 37.00 02 21 01.70 02 21 26.90 02 21 46.0 02 22 02.60	038 54 00 057 46 00 074 47 00 084 55 00 091 49 00	55 38 00 55 43 00 53 08 00 59 02 00 47 03 00	
MEUOON FR S FERNNDO SP OUNLAP ONTAR CAMBROG MASS CAMBROG MASS	48 48 18 N 36 27 42 N 43 51 46 N 42 22 47 N 42 22 47 N	002 13 52 353 47 42 280 34 40 288 52 14 288 52 14	162 30 244 24 24	02 22 47.10 04 08 21.85 07 30 08.00 07 31 12.20 07 31 14.40	104 21 00 023 15 12 * 005 49 00 * 012 42 00 014 42 00	38 55 00 57 58 00 * 63 06 00 * 40 24 00 41 24 00	
CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	07 31 26.40 07 31 54.30 07 32 02.20 07 32 03.00 07 32 09.40	018 12 00 033 48 00 036 48 00 037 00 00 039 54 00	42 54 00 45 42 00 46 24 00 46 06 00 46 18 00	
CAMBROG MASS PT RICO A WI CAMBROG MASS CAMBROG MASS CAMBROG MASS	42 22 47 N 18 10 31 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 292 54 42 288 52 14 288 52 14 288 52 14	24 408 · 24 24 24	07 32 23.60 07 32 44.16 07 32 46.80 07 33 12.50 07 33 20.00	051 42 00 119 02 24 063 30 00 072 24 00 075 54 00	47 12 00 13 48 36 47 12 00 46 30 00	
CAMBROG MASS CAMBROG MASS CAMBROG MASS PT RICO A WI CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 18 10 31 N 42 22 47 N	288 52 14 288 52 14 288 52 14 292 54 42 288 52 14	24 24 24 408 24	07 33 29 80 07 33 49 00 07 33 49 90 07 34 00 19 07 34 02 60	083 48 00 087 12 00 086 30 00 014 41 24 090 00 00	46 06 00 44 30 00 44 12 00 43 42 00 07 22 12	
CAMBROG MASS CAMBROG MASS CAMBROG MASS OUNLAP ONTAR OUNLAP ONTAR	42 22 47 N 42 22 47 N 42 22 47 N 43 51 46 N 43 51 46 N	288 52 14 288 52 14 288 52 14 280 34 40 280 34 40	24 24 24 244 244	07 34 10.60 07 34 19.80 07 34 28.70 07 38 42.00 07 40 29.00	092 42 00 095 18 00 097 48 00 002 29 54 #	43 06 00 41 36 00 40 36 00 39 06 00 18 12 00 *	
PT RICO A WI	18 10 31 N	292 54 42	408	08 01 00.00	001 45 30 *	62 42 00 * 06 15 36	

STATION	LATITUOE	LONGI TUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
		;	22 JLY 1958	(CONT)			
PT RICO A WI PT RICO A WI PT RICO A WI PT RICO A WI PT RICO A WI	18 10 31 N 18 10 31 N 18 10 31 N 18 10 31 N 18 10 31 N	292 54 42 292 54 42 292 54 42 292 54 42 292 54 42	408 408 408 408 408	08 01 30.00 08 02 00.00 08 02 00.00 08 03 00.00 08 03 30.00	007 01 12 009 39 36 012 51 36 016 07 12 019 52 48	08 28 12 10 23 24 12 24 00 14 33 00 16 45 36	1
PT RICO A WI PT RICO A WI PT RICO A WI PT RICO A WI PT RICO A WI	18 10 31 N 18 10 31 N 18 10 31 N 18 10 31 N 18 10 31 N	292 54 42 292 54 42 292 54 42 292 54 42 292 54 42	408 408 408 408 408	08 04 00.00 08 04 30.00 08 05 00.00 08 05 30.00 08 06 00.00	023 58 48 028 36 00 033 24 00 038 43 12 044 12 36	18 53 24 20 56 24 22 49 48 24 29 24 25 58 48	
PT RICO A WI PT RICO A WI PT RICO A WI PT RICO A WI PT RICO A WI	18 10 31 N 18 10 31 N 18 10 31 N 18 10 31 N 18 10 31 N	292 54 42 292 54 42 292 54 42 292 54 42 292 54 42	408 408 408 4 <b>0</b> 8 408	08 11 30.00 08 12 00.00 08 12 30.00 08 13 00.00 08 13 30.00	101 48 36 105 16 12 108 21 36 111 09 36 116 37 48	22 39 00 21 12 00 19 47 24 18 15 00 16 47 24	
PT RICO A WI PT RICO A WI PT RICO A WI PT RICO A WI PT RICO A WI	19 10 31 N 18 10 31 N 18 10 31 N 18 10 31 N 18 10 31 N	292 54 42 292 54 42 292 54 42 292 54 42 292 54 42	408 408 408 408 408	08 14 00.00 08 15 00.00 08 15 30.00 08 16 00.00 08 16 30.00	116 01 48 120 05 24 121 49 12 123 19 48 124 49 48	15 25 48 12 20 24 10 58 12 09 36 36 08 18 00	
CHARLOTTE NC AMES A IOWA ST PL A MINN AMES IOWA ST PL B MINN	35 13 00 N 42 01 59 N 44 55 03 N 42 01 43 N 44 58 30 N	279 12 30 266 22 00 266 50 01 266 20 59 266 45 59	195 305 306 285	09 14 31.00 09 14 47.00 09 15 19.50 09 15 56.50 09 16 13.20	270 00 00 000 30 00 005 00 00 001 48 34 <b>*</b> 094 15 00	86 00 00 45 00 00 60 30 00 62 24 58 * 68 00 00	
MANHTN B KAN AMES A IOWA AMES A IOWA WPALMB B FLA WPALMB B FLA	39 13 51 N 42 01 59 N 42 01 59 N 27 00 00 N 27 00 00 N	263 22 54 266 22 00 266 22 00 279 51 00 279 51 00	409 305 305	09 16 46.00 09 16 57.79 09 19 26.00 09 19 59.25 09 20 15.25	003 18 00 # 081 00 00 120 30 00 023 09 42 # 023 33 06 #	47 48 00 * 57 36 00 32 48 00 66 44 00 * 63 07 00 *	
WPALMB B FLA EGLN AFB FLA EGLN AFB FLA WPALMB B FLA WPALMB A FLA	27 00 00 N 30 33 00 N 30 33 00 N 27 00 00 N 26 39 30 N	279 51 00 273 22 41 273 22 41 279 51 00 279 55 20	5	09 20 31.24 09 20 58.50 09 21 17.50 09 21 51.25 09 22 29.00	023 53 42 * 002 23 05 * 002 22 24 * 000 52 42 * 090 00 00	58 55 00 <b>*</b> 29 09 09 <b>*</b> 34 18 34 <b>*</b> 35 09 00 <b>*</b> 73 00 00	
WPALMB B FLA MANHTN 8 KAN CURACAO NWI AMES IOWA CURACAO NWI	27 00 00 N 39 13 51 N 12 09 04 N 42 01 43 N 12 09 04 N	279 51 00 263 22 54 291 03 28 266 20 59 291 03 28	409 6	09 23 23.25 09 25 31.10 09 28 14.24 09 28 37.00 09 29 59.78	001 07 24 * 112 05 00 000 20 24 * 019 50 03 * 001 01 48 *	25 01 00 # 22 53 00 02 12 00 # 38 19 30 # 21 16 00 #	
ELTHRA A BWI ELTHRA A BWI ELTHRA A BWI CURACAO NWI ELTHRA A BWI	25 16 03 N 25 16 03 N 25 16 03 N 12 09 04 N 25 16 03 N	283 41 12 283 41 12 283 41 12 291 03 28 283 41 12	38 38 38 6 38	09 30 30 00 09 31 00 00 09 31 30 00 09 31 41 03 09 32 00 00	156 59 24 156 55 48 156 57 00 001 37 42 * 156 51 36	14 46 12 12 44 42 10 51 54 - 36 47 00 * 09 15 00	
ELTHRA A BWI ELTHRA A BWI ELTHRA A BWI AREOUIPA PER SJUAN-GS ARG	25 16 03 N 25 16 03 N 25 16 03 N 16 23 05 S 31 30 37 S	283 41 12 283 41 12 283 41 12 288 27 55 291 22 46	38 38 38 2377 650	09 32 30.00 09 33 00.00 09 33 30.00 09 35 51.00 09 41 00.00	156 51 36 155 51 36 156 51 36 003 10 00 * 004 00 00 *	08 10 12 06 33 00 04 51 36 05 30 00 #	
SPOKN A WASH OENVR A COLO ALMGOO-GS; NM ALMGOO-GS; NM ALBUO-GS	47 37 37 N 39 44 52 N 32 52 22 N 32 52 22 N 35 06 22 N	242 38 59 255 03 24 254 03 05 254 03 05 253 23 14	706 1625 1339 1339 1565	10 58 23.00 11 00 18.60 11 00 47.00 11 02 58.00 11 04 47.00	225 00 00 292 24 00 019 10 00 # 022 35 00 # 022 30 00 #	85 30 00 47 18 00 65 18 00 # 50 42 00 # 47 00 00 #	•
ALMGOO-GS;NM TUCSON ARIZ MIYAZAKI J MIYAZAKI J MIYAZAKI J	32 52 22 N 32 13 59 N 31 55 23 N 31 55 23 N 31 55 23 N	254 03 05 249 03 51 131 25 24 131 25 24 131 25 24	1339 227 8 . 8	11 05 07.00 11 06 14.00 17 53 54.00 17 55 07.00 17 55 11.00	000 44 00 * 000 00 00 004 02 00 * 003 52 00 * 003 51 00 *	46 00 00 46 00 00 * 32 00 00 *	•
KONKO J YATSUSHIRO J HYO SV B 2 J FUCHU J KAGOSHIMA J	34 32 31 N 32 30 21 N 34 35 23 N 34 34 17 N 31 31 34 N	· 133 37 40 130 36 15 133 46 15 133 14 19 130 31 47	4 3 5 30 13	17 56 16.00 17 56 40.00 17 56 53.70 17 57 59.00 19 38 41.00		- 02 00 00	*
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 06 S 31 06 06 S 31 06 06 S 31 06 06 S 31 06 06 S		162 162 162 162 162	20 00 56.29 20 01 12.84 20 01 27.38 20 02 51.27 20 03 07.79	003 55 00 4 004 01 06 4 004 39 42 4	- 07 56 00 - 09 59 00 - 21 26 00	*

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
•			22 JLY 195	B (CONT)		•	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 53 32.40 22 53 41.00 22 53 49.90 22 53 58.50 22 54 33.00	319 00 00 321 24 00 020 18 00 032 54 00 067 48 00	38 00 00 41 30 00 61 30 00 61 36 00 53 42 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 54 42.10 22 54 49.40 22 54 55.90 22 55 03.90 22 55 11.90	072 06 00 075 30 00 078 18 00 081 00 00 083 24 00	50 30 00 48 24 00 46 18 00 43 54 00 42 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 55 16.80 22 55 22.80 22 55 30.70 22 55 38.90 22 55 47.90	085 00 00 086 24 00 088 18 00 089 42 00 091 12 00	40 30 00 39 06 00 37 06 00 35 12 00 33 18 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 55 55.80 22 56 04.10 22 56 11.30 22 56 19.20 22 56 26.20	092 24 00 093 36 00 094 24 00 095 18 00 095 54 00	31 42 00 30 06 00 28 54 00 27 36 00 26 39 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 56 34.60 22 56 41.90 22 56 49.60 22 56 57.00 22 57 05.10	096 42 00 097 24 00 098 00 00 098 06 00 099 06 00	25 12 00 24 06 00 · 23 12 00 22 · 00 21 12 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 57 22.40 22 57 30.30 22 57 40.50 22 57 49.90 22 57 58.30	100 06 00 100 30 00 101 06 00 101 30 00 101 54 00	19 12 00 18 24 00 17 18 00 16 30 00 15 42 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 58 08:00 22 58 17:20 22 58 25:80 22 58 34:70 22 58 43:90	102 18 00 102 36 00 102 54 00 103 18 00 103 36 00	14 42 00 14 06 00 13 18 00 12 36 00 11 54 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 58 52.10 22 59 02.20 22 59 10.20 22 59 19.90 22 59 24.30	103 36 00 104 06 00 104 18 00 106 36 00 104 54 00	11 12 00 10 36 00 10 06 00 09 24 00 08 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103	22 59 37.00 22 59 47.70 22 59 55.50 23 00 03.10 23 00 13.10	105 06 00 105 18 00 105 24 00 105 36 00 105 48 00	08 12 00 07 36 00 07 12 00 06 48 00 06 12 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103	23 00 21.10 23 00 29.80 23 00 38.70 23 00 54.90	106 00 00 106 06 00 106 18 00 106 18 00	05 42 C0 05 18 00 04 48 00 03 48 00	
BERL RU GER	52 32 29 N	013 20 58	23 JLY 195				
MEUOON FR BERL RU GER COPNGN A OEN COPNGN A OEN	48 48 18 N 52 32 29 N 55 44 41 N 55 44 41 N	002 13 52 013 20 58 012 33 09 012 33 09	53 162 53	00 38 51.00 00 39 45.00 00 39 50.50 00 40 00.00 00 40 02.14	012 01 00 * 037 48 00 010 43 00 * 001 38 00 * 001 38 00 *	55 30 00 * 18 58 00 69 30 00 * 58 45 00 * 58 12 00 *	
MEUDON FR MEUOON FR COPNGN A DEN MEUOON FR HANOVR C GER	48 48 18 N 48 48 18 N 55 44 41 N 48 48 18 N 52 24 06 N	002 13 52 002 13 52 012 33 09 002 13 52 009 45 33	162 162 162	00 40 20.70 00 40 38.70 00 40 55.14 00 40 55.55 00 40 55.80	046 54 00 051 09 00 001 33 00 # 054 52 00 003 06 00 #	18 20 00 17 59 00 35 36 00 * 17 31 00 42 50 00 *	
COPNGN A OEN BERL RU GER MEUDON FR BERL RU GER MEUOON FR	55 44 41 N 52 32 29 N 48 48 18 N 52 32 29 N 48 48 18 N	012 33 09 013 20 58 002 13 52 013 20 58 002 13 52	53 162 53 162	00 41 00.00 00 41 07.50 00 41 21.10 00 41 23.00 00 41 38.30	001 33 00 * 002 47 00 * 060 08 00 002 32 00 * 063 16 00	34 25 00 * 46 30 00 * 16 24 00 41 30 00 * 15 37 00	
MEUOON FR MEUOON FR BERL RU GER BERL RU GER MEUOON FR	48 48 18 N 48 48 18 N 52 32 29 N 52 32 29 N 48 48 18 N	002 13 52 002 13 52 013 20 58 013 20 58 002 13 52	162 162 53 53 162	00 41 56.90 00 42 13.30 00 42 32.00 00 43 53.00 00 44 08.20	066 33 00 069 06 00 002 11 00 # 002 04 00 # 082 58 00	14 48 00 14 01 00 23 00 00 * 02 30 00 * 08 25 00	-

		LONGITUOE	HEIGHT	TIME GMT	AZIMUTH	
STATION	LATITUDE	EAST	IN	IN	OR	ELEVATION OR
		2731	METERS	HR MIN SEC	RGT ASCEN *	DECLINATION*
Henerusy sus			23 JLY 195	8 (CONT)		
HERSTMCX ENG CHELMSFO ENG	50 52 01 N	000 20 16	32	02 25 34.00	000 00 00	
HERSTMCX ENG	51 43 00 N 50 52 01 N	000 30 00 000 20 16		02 26 15.00	000 00 00 000 13 00 *	90 00 00
IKARIA IS GR HERSTMCX ENG	37 37 00 N	026 13 30	32 305	02 26 54.00 02 29 50.00	122 00 00	34 00 00 <b>*</b> 52 00 00
HERSTHEN ENG	50 52 01 N	000 20 16	32	02 30 04.00	019 44 00 # 131 00 00	32 42 00 #
IKARIA IS GR	37 37 00 N	026 13 30	305	03 33 00 00		20 00 00
PRET B S AF JOHBG C S AF	25 43 43 S 26 07 00 S	. 028 12 42	1311	02 32 00.00 02 50 00.90	021 47 24 # 003 27 00 #	10 00 00 #
PRET B S AF	25 43 43 S	028 00 00 028 12 42	1615 1311	02 50 06.00	003 27 30 #	12 36 00 # 12 36 00 #
UNION JOHSBG	26 10 55 S	028 04 30	1806	02 51 42.60 02 53 25.50	003 59 00 #	- 01 42 00 *
UNION JOHSBG	26 10 55 S	028 04 30	1806		004 34 00 *	- 14 30 00 *
JOHBG E S AF UNION JOHSBG	26 08 00 S	028 01 00	1672	02 54 02.00 02 56 30.60	004 52 00 *	- 19 00 00 *
OLFSFTN S AF	26 10 55 S 25 57 33 S	028 04 30 028 14 53	1806	02 56 48.20	005 50 00 # 005 53 00 #	- 33 48 00 <b>*</b>
IKARIA IS GR	37 37 00 N	026 13 30	1544 305	03 03 45.90	001 37 00 *	~ 35 30 00 # ~ 21 18 00 #
S FERNNOO SP	36 27 42 N			03 32 00.00	021 47 24 #	10 00 00 #
CAMBROG MASS	42 22 47 N	353 47 42 288 52 14	30 24	04 13 25.00	021 21 00 #	45 36 00 *
CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N	288 52 14	24	06 10 09•12 06 10 16•89	0 <b>55</b> 00 00 053 12 00	05 00 00
LAPLAT C ARG	34 54 26 S	288 52 14 302 05 30	24	06 10 19.48	049 42 00	03 36 00 03 <b>3</b> 6 00
LAPLAT C ARG				08 05 59.40	005 23 28 *	~ 12 34 48 *
LAPLAT C ARG	34 54 26 S 34 54 26 S	302 05 30 302 05 30		08 08 02.10	006 05 33 #	- 21 45 12 *
AMES A IOWA OENVR A COLO	42 01 59 N	266 22 00	305	08 10 23.40 09 19 06.50	006 57 23 *	~ 28 46 30 #
AMES IOWA	39 44 52 N 42 01 43 N	255 03 24 266 20 59	1625	09 19 36.30	333 30 00 031 00 00	38 48 00
MLWKEE A WIS		200 20 39		09 20 04.00	020 39 03 #	31 30 00 72 19 37 #
AMES A TOWA	42 58 07 N 42 01 59 N	271 51 05 266 22 00	294	09 20 39.70	020 12 00 #	
AMES IOWA	42 01 43 N	266 20 59	305	09 20 51.00	356 30 00	48 00 00 <b>*</b> 71 18 00
CHI FAXN ILL CHI CPLN ILL	41 59 00 N 41 51 58 N	272 21 00	218	09 21 31.00 09 21 45.00	023 57 57 <b>*</b> 270 00 00	45 44 08 #
		272 23 35	194	09 22 04.80	022 09 33 *	71 00 00 33 19 48 *
AMES A IOWA CHI FAXN ILL	42 01 59 N 41 59 00 N	266 22 00	305	09 22 42.00	128 30 00	
MEMPHIS TENN	35 09 26 N	272 21 00 270 08 46	218	09 23 39.00	180 00 00	61 48 00 49 00 00
AMES A IOWA AMES IOWA	42 01 59 N	266 22 00	85 305	09 24 09.50 09 24 12.00	090 00 00	71 15 00
	42 01 43 N	266 20 59		09 24 17.00	139 00 00 001 12 42 #	50 18 00 - 01 13 01 +
AIKEN CUM SC WPALMB A FLA	33 34 18 N	278 15 00	137	09 25 35.20		01 13 01 #
AREQUIPA PER	26 39 30 N 16 23 05 S	279 55 20 288 27 <b>5</b> 5	5	09 27 00.00	023 06 30 <b>*</b> 270 00 00	15 36 00 #
AREQUIPA PER AREQUIPA PER	16 23 05 S	288 27 55	2377 2377	09 40 08.90 09 41 11.30	002 06 12 *	80 00 00 14 28 00 #
	16 23 05 S	288 27 55	2377	09 41 26.90	002 27 42 * 002 33 24 *	02 39 00 #
LAPLAT C ARG LAPLAT C ARG	34 54 26 S	302 05 30		09 42 34.10		<b>~</b> 00 26 00 <b>*</b>
LAPLAT C ARG	34 54 26 S 34 54 26 S	302 05 30		09 43 15 80	000 28 29 * 000 36 40 *	29 33 48 *
LAPLAT C ARG	34 54 26 S	302 05 30 302 05 30		09 44 27.80	· 000 52 01 *	26 05 18 # 18 56 18 #
LAPLAT C ARG	34 54 26 S	302 05 30		09 45 21.20 09 45 41.40	001 04 21 * 001 09 09 *	12 43 54 #
LAPLAT C ARG	34 54 26 S	302 05 30				10 03 42 #
LAPLAT C ARG LAPLAT C ARG	34 54 26 S 34 54 26 S	302 05 30		09 46 33.70 09 47 12.70	001 23 20 # 001 35 44 #	02 45 12 #
LAPLAT C ARG	34 54 26 S	302 05 30 302 05 30		09 47 51.60	001 49 20 #	- 03 39 12 # - 10 33 06 #
LAPLAT C ARG	34 54 26 S	302 05 30		09 48 39.30 09 <b>49</b> 45.90	002 08 55 *	~ 19 32 24 *
LAPLAT C ARG	34 54 26 S	302 05 30			002 42 35 *	- 32 42 06 #
LAPLAT C ARG DENVR A COLO	34 54 26 S 39 44 52 N	302 05 30		09 51 12.50 09 56 07.30	003 43 51 #	- 48 08 42 #
ALMGOO-GS NM	32 52 22 N	255 03 24 254 03 05	1625	11 05 47.40	008 53 58 # 270 00 00	- 60 27 18 * 41 18 00
ALMGROO A NM	32 52 24 N	254 02 58	1339 1335	11 05 49.60 11 05 50.00	019 09 12 #	50 48 00 #
KIRTLNO C NM	34 50-53 N	253 02 56			019 08 00 #	50 49 00 #
KIRTLNO C NM KIRTLNO C NM	34 50 53 N	253 02 56	1688 1688	11 06 00.00 11 06 15.40	305 00 00	44 18 00
KIRTLNO C NM	34 50 53 N 34 50 53 N	253 02 56	1688	11 06 30.60	299 33 00 295 15 00	47 01 48
KIRTENO C NM	34 50 53 N	253 02 56 253 02 56	1688 168 <b>8</b>	11 06 45.90	289 37 12	50 25 12 53 47 24
KIRTLNO C NM	34 50 53 N			11 07 01.30	283 10 12	56 45 36
KIRTLNO C NM	34 50 53 N	253 02 56 253 02 56	1688 1688	11 07 16.60	275 30 36	59 30 00
KIRTLNO C NM ALMGDO-GS.NM	34 50 53 N 32 5' 22 N	253 02 56	1688	11 07 25.80 11 07 31.90	269 43 12	61 00 36
KIRTLIND C NM	34 50 53 N	254 03 05 253 02 56	1339	11 07 41.00	265 46 48 021 30 12 #	61 39 00 34 09 00 #
KIRTLNO C NM			1688	11 07 47.20	255 26 24	63 07 12
KIRTLND C NM	34 50 53 N 34 50 53 N	253 02 56	1688	11 08 02.50	244 20 24	
KIRTLNO C NM KIRTLND C NM	34 50 53 N	253 02 56 253 02 56	1685 1688	11 08 17.80	233 13 12	63 44 24 63 15 36
EL PASO TEX	34 50 53 N 31 49 41 N	253 02 56	1688	11 08 33.20 11 08 48.50	223 06 36 214 23 24	62 03 <b>36</b>
	I	253 36 36		11 08 58.50	250 00 00	60 11 24 69 00 00

STATION	LATITUDE	LONGI TUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	A2IMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION#	SLANT RANGE
						DECEMATION	IN KM
ZIRTING C III	T. T		23 JLY 1958	(CONT)			
KIRTLNO C NM ALMGDO-GS.NM KIRTLND C NM KIRTLND C NM KIRTLND C NM	34 50 53 N 32 52 22 N 34 50 53 N 34 50 53 N 34 50 53 N	253 02 56 254 03 05 253 02 56 253 02 56 253 02 56	1688 1339 1688 1688	11 09 03.88 11 09 07.40 11 09 19.10 11 09 34.40 11 09 49.70	206 47 24 022 50 30 * 200 42 36 195 53 24 191 38 24	58 10 12 12 20 00 # 55 24 36 52 54 00 50 13 48	
KIRTLND C NM KIRTLNO C NM KIRTLND C NM KIRTLND C NM KIRTLND C NM	34 50 53 N 34 50 53 N 34 50 53 N 34 50 53 N 34 50 53 N	253 02 56 253 02 56 253 02 56 253 02 56 253 02 56	1688 1688 1688 1688 1688	11 10 05:00 11 10 20:40 11 10 35:70 11 10 51:00 11 10 57:10	183 20 24 185 09 00 182 46 12 180 36 36 179 55 12	47 42 00 45 03 36 42 28 48 40 13 12 39 16 12	
KIRTLND C NM KIRTLND C NM KIRTLNO C NM KIRTLND C NM KIRTLND C NM	34 50 53 N 34 50 53 N 34 50 53 N 34 50 53 N 34 50 53 N	253 02 56 253 02 56 253 02 56 253 02 56 253 02 56	1688 1688 1688 1688 1688	11 11 06.30 11 11 21.60 11 11 36.90 11 11 52.20 11 12 07.60	178 50 24 177 54 36 175 54 36 174 42 36 173 49 00	37 57 36 35 50 24 33 55 12 31 57 00	
KIRTLND C NM KIRTLND C NM KIRTLND C NM KIRTLND C NM PUEBLA P MEX	34 50 53 N 34 50 53 N 34 50 53 N 34 50 53 N 19 03 00 N	253 02 56 253 02 56 253 02 56 253 02 56 261 49 00	1688 1688 1688 1688 2200	11 12 22.90 11 12 39.20 11 12 53.50 11 13 08.80 11 13 16.20	172 45 36 171 48 36 171 00 00 170 15 00 022 42 06 *	30 02 24 28 20 24 26 53 24 25 12 36 23 51 36	
KIRTLND C NM MIYAZAKI J MIYAZAKI J MIYAZAKI J KASHIWABRA J	34 50 53 N 31 55 23 N 31 55 23 N 31 55 23 N 31 55 23 N 34 30 24 N	253 02 56 131 25 24 131 25 24 131 25 24 135 48 15	1688 8 8 8	11 13 18.00 17 56 05.00 17 57 42.00 17 58 59.00 17 59 15.00	169 51 00 008 12 00 * 004 25 00 * 003 29 00 * 001 53 00 *	23 03 36 77 00 00 * 65 00 00 * 47 00 00 *	
KASHIWABRA J YATSUSHIRO J KANYAMACHI J ASHIYA J KAGOSHIMA J	34 30 24 N 32 30 21 N 34 03 46 N 34 43 42 N 31 31 34 N	135 48 15 130 36 15 135 15 10 135 18 55 130 31 47	66 3 40 14 13	18 00 20.00 18 01 15.00 18 01 34.00 18 02 00.00 19 46 13.00	002 05 00 * 090 00 00 002 20 00 * 002 18 00 * 022 01 00 *	23 00 00 * 23 00 00 * 28 00 00 07 00 00 * 01 00 00 *	
KAGOSHIMA J HANOVR B GER	31 31 34 N 52 22 10 N	130 31 47 009 45 11	13	19 48 24.00 23 45 14.00	023 07 00 *	= 22 00 CO # 34 45 00 #	
			24 JLY 1958				
COPNGN A DEN COPNGN A DEN COPNGN A DEN CAMBR U ENG COPNGN A OEN	55 44 41 N 55 44 41 N 55 44 41 N 52 12 51 N 55 44 41 N	012 33 09 012 33 09 012 33 09 000 D5 41 012 33 09	28	00 41 56.00 00 42 15.00 00 42 39.00 00 42 40.20 00 42 50.00	013 42 00 * 013 54 00 * 014 12 00 * 015 54 00 015 39 00 *	49 00 00 * 53 50 00 * 61 00 00 * 27 48 00 74 20 00 *	
HANOVR C GER BILTHVN NETH COPNGN A DEN BILTHVN NETH BILTHVN NETH	52 24 06 N 52 08 27 N 55 44 41 N 52 08 27 N 52 08 27 N	009 45 33 005 12 46 012 33 09 005 12 46 005 12 46		00 43 14.20 00 43 14.20 00 43 22.00 00 43 23.20 00 43 31.20	002 07 30 * 007 02 36 * 016 05 00 * 006 25 18 * 005 55 18 *	34 30 00 * 69 00 00 * 75 40 00 * 68 36 00 * 67 42 00 *	
CAMBR U ENG BILTHVN NETH COPNGN A DEN BILTHVN NETH COPNGN A OEN	52 12 51 N 52 08 27 N 55 44 41 N 52 08 27 N 55 44 41 N	000 05 41 005 12 46 -012 33 09 005 12 46 012 33 09	28	00 43 38.70 00 43 40.10 00 43 41.60 00 43 49.20 00 44 13.00	038 42 00 005 24 48 * 019 22 00 * 004 57 54 * 023 04 00 *	29 30 00 66 24 00 * 79 55 00 * 64 54 00 * 70 00 00 *	
CAMBR U ENG COPNGN A DEN HANOVR B GER BERLN SG GER COPNGN A DEN	52 12 51 N 55 44 41 N 52 22 10 N 52 28 30 N 55 44 41 N	000 05 41 012 33 09 009 45 11 013 20 30 012 33 09	28 50	00 44 41.90 00 44 43.00 00 45 01.40 00 45 15.00 00 45 33.00	059 54 00 000 02 00 * 002 07 30 * 043 00 00 000 34 00 *	26 48 00 55 25 00 # 34 45 00 # 56 12 00 34 15 00 #	
COPNGN A DEN HANOVR D GER CAMBR U ENG BERLN SG GER CAMBR U ENG	55 44 41 N 52 22 00 N 52 12 51 N 52 28 30 N 52 12 51 N	012 33 09 009 40 00 000 05 41 013 20 30 000 05 41	28 50 28	00 45 43.00 00 46 01.60 00 46 08.90 00 46 38.00 00 47 28.60	000 41 00 * 002 07 30 * 079 06 00 087 30 00 089 18 00	30 55 00 * 34 30 00 * 20 06 00 43 00 00	
HANOVR C GER BERLN SG GER CAMBR U ENG IKARIA IS GR IKARIA IS GR	52 24 06 N 52 28 30 N 52 12 51 N 37 37 00 N 37 37 00 N	009 45 33 013 20 30 000 05 41 026 13 30 026 13 30	50 28 305 305	00 48 01.80 00 48 03.00 00 48 38.20 00 49 56.50 00 50 51.00	001 49 00 * 103 36 00 095 30 00 002 57 00 * 002 36 00 *	14 12 00 08 30 00 * 28 36 00 09 54 00 52 54 00 *	
IKARIA IS GR IKARIA IS GR IKARIA IS GR IKARIA IS GR IKARIA IS GR	37 37 00 N 37 37 00 N 37 37 00 N 37 37 00 N 37 37 D0 N 37 37 00 N	026 13 30 026 13 30 026 13 30 026 13 30 026 13 30	305 305 305 305 305	00 51 25.00 00 52 54.00 00 53 09.50 00 53 37.00 00 54 26.00	002 34 00 # 002 27 00 # 002 27 00 # 002 30 00 # 002 31 00 #	36 24 00 # 26 24 00 # 07 54 00 # 05 06 00 # 00 54 00 #	
CAMBR U ENG	52 12 51 N	000 05 41	28	02 26 56.40	312 06 00	* 04 30 00 * 25 12 00	

STATION	LATITUDE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			24 JLY 195	B (CONT)			•
CAMBR U ENG HORSBROG ENG CHELMSFO ENG CAMBR U ENG CAMBR U ENG	52 12 51 N 50 53 00 N 51 43 00 N 52 12 51 N 52 12 51 N	000 05 41 000 15 00 000 30 00 000 05 41 000 05 41	28 28 28	02 27 52.80 02 28 16.00 02 28 27.00 02 28 45.20 02 29 28.70	308 18 00 314 00 00 017 35 00 * 299 06 00 027 06 00	38 54 00 46 00 00 56 00 00 * 56 48 00 73 12 00	
HORSBROG ENG CAMBR U ENG MILLHILL ENG CHELMSFO ENG CAMBR U ENG	50 53 00 N 52 12 51 N 51 37 00 N 51 43 00 N 52 12 51 N	000 15 00 000 05 41 359 46 00 000 30 00 000 05 41	28 28	02 29 35.00 02 30 21.90 02 30 25.20 02 30 46.00 02 31 21.40	293 00 00 180 12 00 022 40 30 * 022 55 00 * 157 42 00	74 00 00 69 54 00 36 42 00 # 28 00 00 # 51 06 00	
HORSBROG ENG CAMBR U ENG CAMBR U ENG CAMBR U ENG CAMBR U ENG	50 53 00 N 52 12 51 N	000 15 00 000 05 41 000 05 41 000 05 41 000 05 41	28 28 28 28	02 31 41.00 02 32 13.70 02 33 05.50 02 33 59.20 02 35 01.50	151 00 00 152 12 00 149 36 00 148 06 00 147 06 00	52 00 00 38 48 00 30 06 00 23 24 00 17 36 00	
CHELMSFD ENG HORSBRDG ENG JOHBG C S AF JOHBG C S AF OLFSFTN S AF	51 43 00 N 50 53 00 N 26 07 00 S 26 07 00 S 25 57 33 S	000 30 00 000 15 00 028 00 00 028 00 00 028 14 53	1615 1615 1544	02 35 10.00 02 36 00.00 02 56 46.00 02 59 06.80 03 02 32.52	000 50 00 * 147 00 00 003 32 00 * 004 37 00 * 006 25 06 *	- 15 00 00 * 16 30 00 - 09 36 00 * - 29 54 00 * - 47 14 00 *	
OLFSFIN S AF S FERNNDO SP MADRID SP S FERNNOO SP CPTWN A S AF	25 57 33 S 36 27 42 N 40 24 30 N 36 27 42 N 33 56 00 S	028 14 53 353 47 42 356 18 43 353 47 42 018 28 37 ·	1544 30 655 30 7	03 03 45.92 03 51 17.83 04 19 00.00 04 20 31.80 04 42 48.00	007 05 36 * 000 21 30 * 021 00 00 * 022 43 54 * 001 01 00 *	- 49 31 00 * 43 37 00 * 40 00 00 * - 02 00 00 * - 17 30 00 *	
CAMBROG MASS CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	07 39 32.10 07 39 39.20 07 39 47.00 07 40 05.00 07 40 12.50	329 24 00 329 18 00 329 06 00 328 30 00 329 24 00	27 48 00 31 48 00 35 48 00 39 54 00 42 54 00	
CHI CPLN ILL CAMBROG MASS CAMBROG MASS CAMBRDG MASS CAMBRDG MASS	41 51 58 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	272 23 35 268 52 14 268 52 14 288 52 14 288 52 14	194 24 24 24 24	07 40 21.70 07 40 27.80 07 40 58.60 07 41 04.50 07 41 10.10	003 57 04 * 330 36 00 332 12 00 332 18 00 332 30 00	50 06 30 * 46 54 00 54 24 00 57 24 00 60 24 00	
CAMBROG MASS CAMBROG MASS CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	07 41 13.40 07 41 20.90 07 41 23.50 07 41 41.20 07 41 46.80	332 01 48 332 02 48 332 01 48 341 00 00 341 48 00	61 02 24 64 02 24 66 02 24 72 24 00 75 24 00	
CAMBRDG MASS CAMBROG MASS CAMBRDG MASS OOVER NJ CAMBRDG MASS	42 22 47 N 42 22 47 N 42 22 47 N 40 57 30 N 42 22 47 N	288 52 14 288 52 14 288 52 14 285 28 15 288 52 14	24 24 24 267 24	07 41 51.70 07 41 54.80 07 41 57.60 07 42 01.00 07 42 01.80	342 30 00 344 00 00 345 00 00 000 40 00 *	76 54 00 78 24 00 79 54 00 57 30 00 4 80 <b>54 0</b> 0	
CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14 288 52 14 288 52 14	24 24 24 24 24	07 42 04,40 07 42 06,70 07 42 15,60 07 42 17,20 07 42 19,60	347 30 00 348 00 00 350 00 00 011 00 00 091 00 00	82 30 00 83 12 00 84 36 00 87 42 00 88 30 00	
CAMBRDG MASS CAMBRDG MASS CAMBROG MASS SCHNTOY A NY CAMBRDG MASS	42 72 47 N 42 22 47 N 42 22 47 N 42 53 32 N 42 72 47 N	288 52 14 288 52 14 288 52 14 285 58 57 288 52 14	24 24 24 235 24	07 42 23.00 07 42 30.80 07 42 33.00 07 42 34.30 07 42 35.00	129 00 00 141 30 00 143 54 00 000 31 12 # 145 00 00	87 00 00 84 24 00 83 18 00 33 20 00 82 12 00	
CAMBRDG MASS CAMBROG MASS CLEVELNO A O CAMBRDG MASS CAMBRDG MASS	42 22 47 N 42 22 47 N 41 29 46 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 278 12 16 288 52 14 283 52 14	24 24 220 24 24	07 42 57.40 07 43 05.90 07 43 07.00 07 43 16.10 07 43 28.70	132 54 00 137 42 00 093 00 00 139 42 00 142 06 00	78 30 00 74 30 00 43 00 00 69 30 00 63 36 00	
CAMBROG MASS CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14	24 24 24 24 24	07 43 42.70 07 43 57.30 07 44 03.70 07 45 27.40 07 45 32.60	143 36 00 144 24 00 144 36 00 268 00 00	59 36 00 55 36 00 54 06 00 64 24 00 65 54 00	
CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N 42 22 47 N	288 52 14 288 52 14 288 52 14	24 24 24	07 45 41.80 07 45 49.00 07 46 01.40 07 46 10.50 07 46 11.20	258 00 00 145 42 00 146 18 00 146 30 00	67 54 00 34 12 00 33 24 00 31 24 00 32 54 00	

		LONG 1 TUDE	HEIGHT	TIME GMT	AZIMUTH	ELEVATION	C! ANT
STATION	LAT 1TUOE	EAST	IN METERS	HR MIN SEC	OR RGT ASCEN #	OR DECLINATION+	SLANT RANGE IN KM
			24 JLY 195	P. Jeona			AN INM
CAMBROG MASS	42 22 47 11			o (CONT)			
CAMBRDG MASS	42 22 47 N 42 22 47 N	288 52 14 288 52 14	24 24	07 46 19.10 07 46 20.00	146 48 00	30 74 00	
CAMBROG MASS CAMBROG MASS	42 22 47 N 42 22 47 N	288 52 14	24	07 46 28 80	146 42 00 146 54 00	30 54 00 29 24 00	
CAMBROG MASS	42 22 47 N	298 52 14 288 52 14	24 24	07 46 29•40 07 46 37•50	146 42 00	28 54 00	
CAMBRDG MASS	42 22 47 N	288 52 14	24		147 00 00	28 24 00	
CAMBROG MASS	42 22 47 N	288 52 14	24	07 46 44.50 07 46 46.00	147 06 00 146 36 00	26 24 00	•
CAMBRDG MASS CAMBRDG MASS	42 22 47 N 42 22 47 N	288 52 14 288 52 14	24	07 46 53.80	147 12 00	25 54 00 25 24 00	
CAMBRDG MASS	42 22 47 N	288 52 14	24	07 47 03.40 07 47 03.80	147 18 00 146 36 00	23 54 00	
CAMBRDG MASS	42 22 47 N	288 52 14	24	07 47 13.00		23 30 00	
CAMBRDG MASS CAMBRDG MASS	42 22 47 N 42 22 47 N	288 52 14	24	07 47 13.40	147 24 00 146 36 00	22 54 00	
CAMBRDG MASS	42 22 47 N	288 52 14 288 52 14	24 24	07 47 22.20 07 47 40.60	147 30 00	21 54 00 22 24 00	•
CAMBROG MASS	42 22 47 N	298 52 14	24	07 48 00.60	177 00 00 · 174 00 00	54 48 00 51 24 00	
CAMBROG MASS	42 22 47 N	288 52 14	24	07 48 10.60			
CAMBRDG MASS CAMBRDG MASS	42 22 47 N 42 22 47 N	288 52 14 288 52 14	24	07 48 22.00	172 00 00 147 12 00	48 48 00 18 06 00	
STBARBRA CAL	34 24 30 N	240 18 30	24 12	07 48 38.80 09 13 36.67	147 00 00 022 45 12 #	14 30 00	
STBARBRA CAL	34 24 30 N	240 18 30	12	09 15 37.76	023 47 24 #	40 27 00 # 15 22 00 #	
STBARBRA CAL CCNAV FLA	34 24 30 N 28 28 12 N	240 18 30	12	09 17 46.87	000 37 24 #		
MLWKEE A WIS	42 58 07 N	279 24 36 271 51 05	294	09 23 00.00	281 31 12	- 12 47 00 <b>+</b> 51 29 24	
AMES IOWA W1CH1TA KAN	42 01 43 N 37 41 44 N	266 20 59		09 24 02.40 09 24 54.00	018 25 00 <b>*</b> 020 34 08 <b>*</b>	40 40 00 *	
		262 45 19	413	09 25 10.70	023 02 35 *	52 08 50 # 00 06 00 #	
DENVR A COLO MANHTN B KAN	39 44 52 N 39 13 51 N	255 03 24	1625	09 25 35.40	065 12 00	46 30 00	
MANHTN B KAN	39 13 51 N	263 22 54 263 22 54	409 4 <b>0</b> 9	09 25 37.00	002 32 00	45 30 00 68 48 00	
CHI FAXN ILL MANHTN B KAN	41 59 00 N 39 13 51 N	272 21 00	218	09 25 47.00 09 25 48.00	008 11 00 270 00 00	71 22 00	
	23 13 21 W	263 22 54	409	09 25 57.00	016 23 00	51 00 00 73 33 00	
CCNAV FLA MANHTN B KAN	28 28 12 N 39 13 51 N	279 24 36		09 26 00.00	319 42 36	16 14 42	
AMES IOWA	42 01 43 N	263 22 54 266 20 59	409	09 26 06.00 09 26 11.00	027 02 00	76 01 00	
MANHTN B KAN MANHTN B KAN	39 13 51 N 39 13 51 N	263 22 54 263 22 54	409	09 25 16.00	022 39 50 <b>*</b> 040 46 00	30 38 58 <b>*</b> 77 36 00	
			409	09 26 26.00	056 58 00	78 06 00	
CCNAV FLA MANHTN B KAN	28 28 12 N 39 13 51 N	279 24 36 263 22 54		09 26 30.00	317 49 48	19 34 12	
GHI CPLN ILL	41 51 58 N	272 23 35	409 <b>1</b> 94	09 26 35.00 09 26 41.00	072 26 00	77 41 00	
MANHTN 8 KAN Spokn a Wash	39 13 51 N 47 37 37 N	263 22 54 242 38 59	409	09 26 45.00	021 24 51 * 087 35 00	19 22 00 <b>*</b> 76 29 00	
MANHTN 8 KAN			706	09 26 50.00	002 10 00 *	- 02 40 00 *	
CCNAV FLA	39 13 51 N 28 28 12 N	263 22 54 279 24 36	409	09 26 55.00 09 27 00.00	098 00 00	74 48 00	
MANHTN B KAN MANHTN B KAN	39 13 51 N 39 13 51 N	263 22 54	409	09 27 04:00	315 32 24 106 02 00	23 15 00	
CCNAV FLA	28 28 12 N	263 22 54 279 24 36	409	09 27 14.00 09 27 30.00	113 41 00	72 55 00 70 10 00	
AMES 10WA	42 01 43 N	2// 20 50			312 48 36	27 19 48	
CCNAV FLA	28 28 12 N	265 20 59 279 24 36		09 27 30.00 09 <b>28</b> 00.00	023 43 43 *	07 58 29 #	
BTLSVL-A OKL DANVILLE 1LL	36 42 18 N 40 06 57 N	264 03 36 272 22 26	213	09 28 00.00	309 19 48 002 08 18 *	31 46 48 23 56 00 #	
CCNAV FLA	28 28 12 N	279 24 36	189	09 28 23.00 09 28 30.00	203 00 00	52 00 00	
CCNAV FLA	28 28 12 N	279 24 36			304 54 36	36 32 24	
CCNAV FLA FT WTH C TEX	28 28 12 N	279 24 36		09 29 00.00 09 29 30.00	299 08 24 291 36 18	41 40 12	
CCNAV FLA	32 42 15 N 28 28 12 N	262 37 30 279 24 36	204	09 30 07.00	002 02 00 *	46 45 36 22 20 00 #	
CCNAV FLA	28 28 12 N	279 24 36		09 30 30.00 09 31 00.00	268 43 48 253 19 12	55 16 12 57 17 24	
WPALMB A FLA	26 39 30 N	279 55 20	5	09 31 04.00			
CCNAV FLA	28 28 12 N 28 28 12 N	279 24 36	-	09 31 20.00	270 00 00 223 00 00	56 00 00 55 15 36	
CCNAV FLA	28 28 12 N	279 24 36 279 24 36		09 31 30.00 09 32 30.00	237 25 12	57 15 00	
CCNAV FLA	28 28 12 N	279 24 36		09 33 00.00	211 26 24 202 32 24	51 57 36 48 04 12	
CCNAV FLA	28 25 12 N	279 24 36		09 33 30.00	195 53 24		
CCNAV FLA	28 28 12 N 28 28 12 N	279 24 36 279 24 36		09 34 00.00	199 53 24	43 58 48 39 59 24	
CCNAV FLA	28 28 12 N	279 24 36		09 34 30.00 09 35 00.00	186 48 36	36 17 42	
	28 28 12 N	279 24 36		09 35 30.00	183 40 12 181 13 48	32 17 42 29 34 12	
CCNAV FLA	28 28 12 N 28 28 12 N	279 24 36		09 36 00.00	179 01 12		
CCNAV FLA	28 28 12 N	279 24 36 279 24 36		09 36 30.00	177 15 54	26 39 00 23 55 12	
CCNAV FLA	28 28 12 N 28 28 12 N	279 24 36		09 37 00.00 09 37 30.00	175 48 00 174 29 24	21 24 54	
- =n	IC N	279 24 36		09 38 00.00	173 22 48	19 07 30 16 57 00	

		LONGITUOE	HE IGHT	7IME GMT IN	AZIMUTH OR	ELEVATION OR	SLANT RANGE
STATION	LATITUDE	EAST	METERS	HR MIN SEC	RGT ASCEN *	DECLINATION*	IN KM
			24 JLY 1958	(CONT)		1	
STBARBRA CAL STBARBRA CAL AREOUIPA PER LAPLAT C ARG AREOUIPA PER	34 24 30 N 34 24 30 N 16 23 05 S 34 54 26 S 16 23 05 S	240 18 30 240 18 30 288 27 55 302 05 30 288 27 55	12 12 2377 2877	09 40 31.49 09 41 52.17 09 46 09.00 09 46 13.60 09 46 40.20	023 04 12 * 023 26 36 * 001 33 30 * 023 32 00 * 001 45 48 *	- 36 23 00 # - 46 24 00 # - 10 00 00 # 31 06 36 # 16 43 00 #	
LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S	302 05 30 302 05 20 302 05 30 302 05 30 302 05 30		09 49 34.90 09 49 51.80 09 53 03.20 09 54 54.50 10 00 04.10	000 14 49 * 000 18 37 * 001 04 27 * 001 56 02 * 009 17 07 *	10 03 00 # 07 58 54 # = 24 13 06 # = 47 32 36 # = 66 53 24 #	
SPOKN A WASH OENVR A COLO ALMGRDO A NM EL PASO TEX ALMGROO A NM	47 37 37 N 39 44 52 N 32 52 24 N 31 49 41 N 32 52 24 N	242 38 59 255 03 24 254 02 58 253 36 36 254 02 58	706 1625 1335	11 04 10.00 11 10 33.60 11 11 27.00 11 13 21.50 11 13 40.00	225 00 00 259 30 00 020 17 00 * 145 00 00 022 03 00 *	49 00 00 33 00 00 29 02 00 * 51 00 00 01 48 00 *	
ALMGROO A NM PUEBLA P MEX SAPPORO J HYO SV B 2 J SAPPORO J	32 52 24 N 19 03 00 N 43 04 49 N 34 35 23 N 43 04 49 N	254 02 58 261 49 00 141 22 13 133 46 15 141 22 13	1335 2200 20 5 20	11 14 56.00 11 16 35.57 18 01 27.00 18 02 55.60 18 03 31.00	022 44 00 * 025 57 42 * 020 52 00 * 001 04 18 * 022 43 00 *	- 10 46 00 # 13 15 00 # 25 14 00 # 43 00 00 # - 02 14 00 #	
KONKO J WOOMER AUS WOOMER AUS WOOMER AUS	34 32 31 N' 31 06 06 S 31 06 06 S 31 06 06 S 31 06 06 S	133 37 40 135 46 54 136 46 54 136 46 54 136 46 54	4 162 162 162 162	18 03 50.00 19 57 29.13 19 57 45.59 20 10 50.74 20 11 07.13	002 03 00 # 005 03 36 # 005 10 12 # 002 45 06 # 002 54 30 #	26 00 00 * - 15 19 00 * - 17 06 00 * - 28 22 00 * - 31 15 00 *	
ADLAIO C AUS WOOMER AUS WOOMER AUS	34 44 00 S 31 06 06 S 31 06 06 S	138 40 00 136 46 54 136 46 54	162 162	20 13 09.00 20 13 34.78 20 13 51.25	003 56 00 * 004 45 36 * 005 00 00 *	- 40 00 00 * - 52 00 00 * - 53 27 00 *	
			25 JLY 19	58			
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 47 22.40 00 47 47.00 00 48 04.20 00 48 26.80 00 48 42.80	015 26 00 023 46 00 029 48 00 038 18 00 043 44 00	26 21 00 28 06 00 28 58 00 29 41 00 29 35 00	
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 46 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 48 59.80 00 49 15.40 00 49 34.60 00 49 52.50 00 50 07.70	049 34 00 054 41 00 060 33 00 065 29 00 609 33 00	29 25 00 28 59 00 28 10 00 27 00 00 26 04 00	
MEUOON FR MEUDON FR MEUDON FR MEUDON FR MEUOON FR	48 48 16 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 57 002 13 52	152 162 162 162 162	00 50 26.70 00 50 43.30 00 51 02.00 00 51 20.10 00 51 35.10	073 57 00 077 28 00 081 00 00 084 05 00 086 20 00	24 44 00 23 33 00 22 08 00 20 48 00 19 44 00	
MEUDON FR MEUDON FR MEUDON FR MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 52 01.00 00 52 53.70 00 53 13.20 00 53 29.20 00 53 46.80	089 58 00 095 48 00 097 34 00 098 59 00 100 17 00	17 53 00 14 10 00 13 03 00 12 13 00 11 02 00	
IKARIA IS GR MEUDON FR MEUDON FR IKARIA IS GR MEUDON FR	37 37 00 N 48 48 18 N 48 48 18 N 37 37 00 N 48 48 18 N	026 13 30 002 13 52 002 13 52 026 13 20 002 13 52	305 162 162 305 162	00 53 47.00 00 54 04.60 00 54 23.30 00 54 44.00 00 55 06.80	001 14 00 1 101 33 00 102 50 00 001 31 00 1 105 24 00	10 01 00 08 59 00	
IKARIA IS GR MEUDON FR MEUDON FR IKARIA IS GR IKARIA IS GR	37 37 00 N 48 48 18 N 48 46 18 N 37 37 00 N 37 37 00 N	026 13 30 002 13 52 002 13 52 026 13 30 026 13 30	305 162 162 305 305	00 55 15.00 00 55 24.10 00 55 41.40 00 56 04.00 00 58 29.00	106 15 00 107 04 00 001 37 00	05 49 00 04 57 00 16 36 00	•
PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2662 2662 2862	02 30 09,50 02 30 25,50 02 30 36,00 02 30 50,00 02 31 00,00	329 24 00 329 30 00 330 00 00	05 30 00 07 12 00 07 48 00 09 30 00 10 30 00	
PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32	2862	02 31 16.50 02 31 26.00 02 31 34.00 02 31 44.00 02 31 53.00	330 30 00 330 36 00 330 54 00	12 24 00 13 30 00 14 30 00 16 00 00 17 12 00	

STATION	LATITUOE		HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
		2	5 JLY 1958	(CONT)			
PIC MIOI FR PIC MIOI FR PIC MIDI FR PIC MIOI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	02 32 04.00 02 32 10.50 02 32 18.50 02 32 29.50 02 32 37.00	331 30 00 331 42 00 331 54 00 332 18 00 332 36 00	18 50 00 19 24 00 20 36 00 22 24 00 23 36 00	
PIC MIOI FR PIC MIDI FR PIC MIOI FR PIC MIDI FR PIC MIDI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2062 2062	02 32 45.50 02 32 58.00 02 33 08.00 02 33 18.50 02 33 29.00	333 00 00 333 30 00 333 54 00 334 30 00 335 00 00	25 24 00 27 24 00 29 30 00 31 36 00 34 18 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	02 33 36.00 02 33 43.00 02 33 52.00 02 34 01.50 02 34 09.50	335 42 00 336 00 00 336 48 00 337 30 00 338 30 00	36 24 00 37 24 00 39 54 00 42 24 00 44 30 00	
PIC MIDI FR AGEN FRANCE PIC MIOI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 44 10 36 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 35 42 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862	02 34 14.50 02 34 16.00 02 34 24.50 02 34 35.00 02 34 44.00	339 00 00 331 00 00 340 18 00 341 48 00 343 42 00	46 18 00 51 06 00 49 18 00 52 42 00 55 30 00	
PIC MIDI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2662 2862 2862 2862 2862	02 34 53.00 02 35 02.00 02 35 13.00 02 35 26.00 02 35 34.00	345 48 00 348 30 00 352 48 00 359 36 00 005 18 00	58 42 00 62 24 00 66 00 00 70 24 00 73 24 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR S FERNNOO SP PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 36 27 42 N 42 56 12 N	000 08 32 000 08 32 000 08 32 353 47 42 000 08 32	2862 2862 2862 30 2862	02 35 42.00 02 35 54.00 02 36 04.50 02 36 06.03 02 36 12.00	014 54 00 034 12 00 056 00 00 000 36 30 # 073 36 00	74 54 00 78 24 00 79 24 00 58 53 00 **	
PIC MIDI FR PIC MIDI FR PIC MIDI FR MEUOON FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 48 48 18 N 42 56 12 N	000 08 32 00D 08 32 000 08 32 002 13 57 000 08 32	2862 2862 2862 162 2862	02 36 24.50 02 36 34.00 02 36 43.50 02 36 50.00 02 36 50.50	094 36 00 105 12 00 112 48 00 171 50 00 117 12 00	76 12 00 73 48 00 71 00 00 44 46 00 68 24 00	
PIC MIDI FR MEUOON FR PIC MIOI FR PIC MIOI FR PIC MIDI FR	42 56 12 N 48 48 18 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 002 13 52 000 08 32 000 08 32 000 08 32	2862 162 ?862 ?862 2062	02 36 58.50 02 37 04.60 02 37 05.00 02 37 11.50 02 37 21.00	121 42 00 169 22 00 123 30 00 125 18 00 127 42 00	66 12 00 41 43 00 64 18 00 62 12 00 59 24 00	
MEUOON FR PIC MIDI FR	48 48 18 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	002 13 52 000 08 32 000 08 32 000 08 32 000 08 32	162 2862 2862 2862 2862	02 37 21.10 02 37 26.50 02 37 32.50 02 37 40.00 02 37 45.00	167 C9 00 128 54 00 130 12 00 131 24 00 132 24 00	38 46 00 57 42 00 56 12 00 54 12 00 51 54 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2362 2862 2862 2862 2862	02 37 55.00 02 38 01.50 02 38 08.50 02 38 16.00 02 38 22.00	133 18 00 134 12 00 134 48 00 135 42 00 136 00 00	50 18 00 46 30 00 47 18 00 45 30 00 44 06 00	
PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 00 32 000 08 32 000 08 32 000 08 32 000 08 32	2 3 6 2 2 8 6 2 2 8 6 2 2 8 6 2 2 8 6 2	02 38 30.00 02 38 37.50 02 38 45.00 02 38 55.50 02 39 04.50	136 42 00 137 06 00 137 48 00 137 12 00 138 48 00	42 30 00 41 18 00 59 30 00 37 42 00 36 24 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 00 32 000 08 32	2862 2862 2862 2862 2862 2862	02 39 11.00 02 39 16.00 02 39 21.50 02 39 27.50 02 39 35.50	139 12 00 139 24 00 139 42 00	35 24 00 34 24 00 33 36 00 35 00 00 31 42 00	
PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32	2862 2062 2062 2962 2862	02 39 42.00 02 39 48.50 02 39 58.50 02 40 07.50 02 40 17.50	140 24 00 140 54 00 141 06 00	38 48 00 30 06 00 28 36 00 27 30 00 26 24 90	·
PIC MIDI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR PIC MIOI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	02 40 26.50 02 40 37.00 02 40 45.00 02 40 54.00 02 41 03.50	141 48 00 142 00 00 142 12 00	25 18 00 24 24 00 25 24 00 22 30 G0 21 30 00	

STATION	LATITUDE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			25 JLY 1958	(CONT)			
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	02 41 10.00 02 41 18.00 02 41 27.50 02 41 34.40 02 41 42.00	142 24 00 142 30 00 142 42 00 142 54 00 143 00 00	20 54 00 20 24 00 19 24 00 18 48 00 18 12 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	02 41 52.00 02 41 59.50 02 42 05.50 02 42 13.50 02 42 20.50	143 12 00 143 18 00 143 18 00 143 24 00 143 36 00	17 24 00 16 48 00 16 18 00 15 36 00 15 06 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	02 42 28.00 02 42 37.50 02 42 47.00 02 42 53.50 02 43 04.00	143 42 00 143 48 00 143 48 00 143 54 00 144 00 00	14 30 00 14 00 00 13 24 00 12 48 00 12 18 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	02 43 11.50 02 43 25.00 02 43 30.50 02 43 37.50 02 43 48.00	144 06 00 144 12 00 144 30 00 144 30 00 144 36 00	11 30 00 10 36 00 10 24 00 10 00 00 09 24 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	02 43 55 50 0 02 44 04 00 02 44 12 00 02 44 19 00 02 44 27 50	144 42 00 144 48 00 144 48 00 144 48 00 144 54 00	08 48 00 08 24 00 08 00 00 07 30 00 07 00 60	
PIC MIOI FR PIC MIDI FR PIC MIOI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 55 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	02 44 34 50 02 44 41 50 02 44 48 50 02 44 58 00 02 45 06 650	144 54 00 001 45 00 145 00 00 145 06 00 145 06 00	06 30 00 06 18 00 06 00 00 05 24 00 05 06 00	
PIC MIDI FR	42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 06 32 000 08 32	2862 2862 2862 2862 2862	02 45 16.00 02 45 25.50 02 45 33.00 02 45 41.50 02 45 48.00	145 18 00 145 24 00 145 30 00 145 36 00 145 36 00	04 24 00 04 06 00 03 36 00 03 24 00 03 06 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	02 45 56.00 02 46 05.00 02 46 17.50 02 46 27.00 02 46 35.50	145 36 00 145 42 00 145 48 00 145 48 00 145 54 00	02 36 00 02 00 00 01 36 00 01 24 00 01 00 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR JOH8G C 5 AF JOH8G C 5 AF	42 56 12 N 42 56 12 N 42 56 12 N 26 07 00 5 26 07 00 S	000 08 32 000 08 32 000 08 32 028 00 00 028 00 00	2862 2862 2862 1615 1615	02 46 44.50 02 46 54.00 02 47 08.00 03 00 31.50 03 01 40.00	146 00 00 146 00 00 146 06 00 002 40 00 * 003 13 00 *	00 24 00 00 06 00 - 00 12 00 - 14 12 00 # - 26 12 00 #	
BOYDN BLMFTN JOHBG E S AF BOYDN BLMFTN OLFSFTN S AF OLFSFTN S AF	29 02 18 5 26 08 00 5 29 02 18 5 25 57 33 5 25 57 33 5	026 24 21 028 91 00 .026 24 21 028 14 53 028 14 53	1387 1672 1387 1544 1544	03 02 43.00 03 02 48.60 03 03 42.00 03 06 29.03 03 07 36.29	003 46 54 * 003 50 30 * 004 29 12 * 006 21 54 * 007 08 42 *	- 24 54 00 # - 36 18 00 # - 34 18 00 # - 55 28 00 # - 56 35 00 #	
BOYON BLMFIN CPTWN A S AF CAMBROG MASS COLUMBUS O SCHNTDY A NY	29 02 18 5 33 56 00 5 42 22 47 N 40 01 49 N 42 53 32 N	. 026 24 21 018 28 37 288 52 14 276 57 46 285 58 57	1387 7 24 229 235	03 07 42.00 04 50 32.00 07 45 41.80 07 46 58.00 07 47 24.50	006 54 24 * 183 30 00 258 00 00 002 02 00 * 000 23 49 *	56 00 00 67 54 00 22 45 00 4 09 24 00	
LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	34 54 26 5 34 54 26 5 34 54 26 5 34 54 26 5 34 54 26 5	302 05 30 302 05 30 302 05 30 302 05 30 302 05 30	11	08 08 31.20 08 08 32.70 08 10 44.60 08 11 17.40 08 11 29.60	002 54 01 * 003 36 27 * 003 47 57 *	17 59 42 4 17 50 36 4 02 32 24 4 - 01 38 06 4 - 03 06 00	
LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S	302 05 30 302 05 30 302 05 30 302 05 30 302 05 30		08 11 54 00 08 13 39 08 08 14 20 00 08 14 49 05 08 16 08 03	004 44 49 * 005 03 00 * 005 16 58 *	- 22 31 48 - 25 15 66	
AMES A IOWA SPOKN A WASH AMES A IOWA AMES A IOWA AMES A IOWA	42 01 59 N 47 37 37 N 42 01 59 N 42 01 59 N 42 01 59 N	266 22 00 242 38 59 266 22 00 266 22 00 266 22 00	305 706 <b>3</b> 05 305 305	09 25 14.00 09 25 33.50 09 26 34.00 09 27 34.00 09 28 28.00	045 00 00 309 00 00 300 00 00	16 00 00 48 00 00 26 42 00 37 36 00 48 54 00	

STATION	LATITUOE		HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR OECLINATION*	SLANT RANGE 'N KM
		2	25 JLY 1958	(CORT)			
AMES IOWA AMES A IOWA MANHTN B KAN MANHTN B KAN AMES IOWA	42 01 43 N 42 01 59 N 39 13 51 N 39 13 51 N 42 01 43 N	266 20 59 266 22 00 263 22 54 263 22 54 266 20 59	305 409 409	09 28 56.00 09 29 29.00 09 29 40.00 09 30 00.00 09 30 08.00	020 15 19 * 254 00 00 063 15 00 096 32 00 021 47 52 *	35 12 31 * 58 18 00 72 21 00 79 10 00 17 42 21 *	
MANHTN B KAN AMES A IOWA MANHTN B KAN MANHTN B KAN WICHITA KAN	39 13 51 N 42 01 59 N 39 13 51 N 39 13 51 N 37 41 44 N	263 22 54 266 22 00 263 22 54 263 22 54 262 45 19	409 305 409 409 413	09 30 09.00 09 30 20.50 09 30 27.00 09 30 27.20 09 30 37.70	116 50 00 220 00 00 150 35 00 022 48 36 * 023 11 58 *	80 00 00 57 18 00 78 42 00 29 01 12 * 34 36 00 *	
WICHITA KAN AMES A 10WA BRYAN TEX SPOKN A WASH AMES A 10WA	37 41 44 N 42 01 59 N 30 38 14 N 47 37 37 N 42 01 59 N	262 45 19 266 22 00 263 39 58 242 38 59 266 22 00	413 305 92 706 305	09 30 37.70 09 31 11.50 09 31 14.10 09 31 35.00 09 32 04.50	023 11 58 * 196 30 00 023 10 00 * 000 00 00 184 30 00	00 36 00 <b>*</b> 50 18 00 <b>*</b> 63 36 00 <b>*</b> 30 00 00 41 36 00	
EGLN AFB FLA EGLN AFB FLA BILOXI MISS EGLN AFB FLA AMES A IOWA	30 33 00 N 30 33 00 N 30 23 27 N 30 33 00 N 42 01 59 N	273 22 41 273 22 41 271 08 28 273 22 41 266 22 00	7 305	09 32 23.20 09 32 32.30 09 33 06.00 09 33 06.50 09 33 13.00	020 50 03 * 020 58 51 * 270 00 00 021 48 02 * 175 00 00	33 41 26 # 31 50 09 # 68 00 00 20 07 15 # 32 18 00	
OENVR A COLO AMES A IOWA EGLN AFB FLA MANHTN B KAN WPALMB A FLA	39 44 52 N 42 01 59 N 30 33 00 N 39 13 51 N 26 39 30 N	255 03 24 266 22 00 273 22 41 263 22 54 279 55 20	1625 305 409 5	09 33 23.40 09 34 14.00 09 34 16.50 09 34 22.00 09 34 30.00	133 18 00 170 30 00 022 07 46 * 156 02 00 270 00 00	63 24 00 25 18 00 13 24 08 * 29 15 00 41 00 00	
AMES A IOWA EGLN AFB FLA LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	42 01 59 N 30 33 00 N 34 54 26 S 34 54 26 S 34 54 26 S	266 22 00 273 22 41 302 05 30 307 05 30 302 05 30	305	09 36 10 • 50 09 36 25 • 70 09 53 56 • 20 09 54 31 • 50 09 55 35 • 60	290 30 00 022 19 54 * 023 39 11 * 023 43 24 * 023 53 26 *	59 00 00 09 12 37 * 01 35 24 * - 03 17 06 * - 13 26 12 *	
LAPLAT C ARG LAPL 1 C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S	302 05 30 302 05 30 302 05 30 302 05 30 302 05 30		09 55 50.20 09 58 00.70 09 58 36.00 09 58 57.70 10 03 03.00	023 55 42 * 000 25 15 * 000 34 37 * 000 42 33 * 008 45 37 *	- 15 56 30 ** - 43 54 54 ** - 49 21 42 ** - 54 00 30 ** - 78 58 00 **	• •
LAPLAT C ARG 8RYAN TEX ALMGROO A NM ALBUO-GS NM CHIN LAK CAL	34 54 26 S 30 38 14 N 32 52 24 N 35 06 22 N 35 39 25 N	302 05 30 263 39 58 254 02 58 253 23 14 242 20 13	92 1335 1565 701	10 06 16.10 10 31 25.10 11 13 21.00 11 13 58.00 11 14 19.20	011 05 47 * 023 21 00 * 018 42 00 * 019 26 00 * 270 00 00	61 00 00 4 61 00 00 4 31 46 00 4 23 00 00 6 65 30 00	<b>)</b>
ALMGROO A NM ALMGROO A NM A NM A V S V S VH L S U S VH L S V S V M L L S V M L ALMGROO A V M L	32 52 24 N 32 52 24 N 34 35 23 N 31 31 34 N 31 55 23 N	254 02 58 254 02 58 133 45 15 130 31 47 131 25 24	1335 1335 5 13 8	11 15 00.00 11 15 53.00 18 05 11.00 18 07 38.00 18 07 53.00	019 50 00 # 021 03 00 # 022 14 00 # 090 00 00 001 37 00 #	03 06 00 9 55 48 00 9 65 00 00	•
TAIPEI TAIWN MIYA2AKI J MIYA2AKI J MIL RAO MASS JOKNN OB FIN		121 30 02 131 25 24 131 25 24 288 30 28 023 30 09	22 8 8 155 103	18 08 45.60 18 10 40.00 18 11 09.00 22 54 03.00 23 05 40.50	003 18 00 4 001 32 00 3 001 39 00 3 026 24 00 291 48 00	- 10 00 00	•
JOKNN OB FIN COPNGN A DEN COPNGN A DEN JOKNN OB FIN COPNGN A DEN	55 44 41 N 55 44 41 N 60 48 50 N	023 30 09 012 33 09 012 33 09 023 30 09 012 33 09	103	23 06 57.50 23 07 23.04 23 07 30.00 23 07 57.10 23 08 00.00	002 06 00 9 002 04 00 9 127 36 00	32 10 00 41 36 00	•
			26 JLY 1	958			
UNION JOHSBG BERLN SG GER BERLN SG GER BERLN SG GER COPNGN 8 OEN	52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30	1806 50 50 50	00 30 25.20 00 50 03.20 00 50 28.70 00 50 37.90 00 50 47.32	318 06 48 014 29 00 318 06 48	29 12 00	
COPNGN A DEN BERLN SG GEF BERLN SG GEF BERLN SG GEF BERLN SG GEF	R 52 28 30 N R 52 28 30 N R 52 28 30 N	013 20 30 013 20 30 013 20 30	50 50 50 50	00 50 52.00 00 51 07.00 00 51 40.70 00 51 50.80 00 52 07.60	318 24 48 319 12 48 019 18 00	48 00 00 61 48 00	
BERLN SG GEI BERLN SG GEI BERLN SG GE	R 52 28 30 N	013 20 30	50	00 52 58 46 00 53 09 99 00 53 25 83	022 55 00	80 00 00 40 00 00 67 48 00	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION#	SLANT RANGE IN KM
			26 JLY 1958	(CONT)			
8ERLN SG GER BERLN SG GER IKARIA IS GR BERLN SG GER IKARIA IS GR	52 28 30 N 52 28 30 N 37 37 00 N 52 28 30 N 37 37 00 N	013 20 30 013 20 30 026 13 30 013 20 30 026 13 30	50 50 305 50 305	00 54 07.10 00 54 40.80 00 54 46.00 00 54 50.60 00 55 15.00	137 18 48 137 48 48 016 06 00 * 000 03 00 * 017 35 00 *	52 48 00 43 42 00 70 42 00 # 10 00 00 # 74 06 00 #	
8ERLN SG GER 8ERLN SG GER IKARIA IS GR IKARIA IS GR BERLN SG GER	52 28 30 N 52 28 30 N 37 37 00 N 37 37 00 N 52 28 30 N	013 20 30 013 20 30 026 13 30 026 13 30 013 20 30	50 50 305 305 50	00 55 16.20 00 56 10.80 00 56 21.60 00 56 49.00 00 56 52.40	138 12 48 138 18 48 021 23 00 # 022 21 00 # 138 30 48	36 06 00 27 24 00 68 30 00 # 62 18 00 # 22 42 00	
8ERLN SG GER IKARIA IS GR 8ERLN SG GER 8ERLN SG GER 8ERLN SG GER	52 28 30 N 37 37 00 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 026 13 30 013 20 30 013 20 30 013 20 30	50 305 50 50	00 57 38.50 00 58 24.60 00 58 26.30 00 58 41.20 00 58 58.40	138 42 48 000 09 36 * 139 00 48 000 49 00 * 139 06 48	18 06 00 29 06 00 # 14 06 00 15 30 00 # 12 00 00	. 2
IKARIA IS GR IKARIA IS GR 8ERLN SG GER 8ERLN SG GER IKARIA IS GR	37 37 00 N 37 37 00 N 52 28 30 N 52 28 30 N 37 37 00 N	026 13 30 ,026 13 30 013 20 30 013 20 30 026 13 30	305 305 50 50 305	00 59 11.00 00 59 36.00 00 59 45.60 01 00 02.70 01 00 55.00	000 25 00 * 000 35 00 * 139 18 48 139 18 48 000 56 00 *	15 18 00 * 08 18 00 * 09 00 00 08 00 00 ** 07 36 00 *	
IKARIA IS GR IKARIA IS GR IKARIA IS GR LEPUY FRANCE S FERNNDO SP	37 37 00 N 37 37 00 N 37 37 00 N 45 03 18 N 36 27 42 N	026 13 30 026 13 30 026 13 30 003 53 42 353 47 42	305 305 305 30	01 01 27.00 01 02 20.00 01 03 00.00 02 40 00.00 02 40 32.91	001 03 00 * 001 09 00 * 001 11 00 * 110 00 00 00 001 53 48 *	- 12 36 00 * - 16 42 00 * - 20 42 00 * 57 00 00 42 46 00 *	= ·
OLFSFTN S AF UNION JOHSBG PRET 8 S AF JOH8G C S AF PRET 8 S AF	25 57 33 S 26 10 55 S 25 43 43 S 26 07 00 S 25 43 43 S	028 14 53 028 04 30 028 12 42 028 00 00 028 12 42	1544 1806 1311 1615 1311	03 02 28.95 03 02 52.00 03 03 45.99 03 05 31.00 03 05 38.20	001 00 36 * 001 18 00 * 001 37 00 * 002 35 00 * 002 37 00 *	- 05 09 00 * - 09 00 00 * - 21 18 00 * - 40 00 00 * - 43 06 00 *	
OLFSFIN S AF OLFSFIN S AF S FERNNOO SP S FERNNOO SP MLWKEE A WIS	25 57 33 S 25 57 33 S 36 27 42 N 36 27 42 N 42 58 07 N	028 14 53 028 14 53 353 47 42 353 47 42 271 51 05	1544 1544 30 30 294	03 06 10.14 03 10 15.07 04 26 25.76 04 26 27.76 06 01 39.50	002 55 06 # 006 46 36 # 020 38 24 # 020 38 24 # 003 47 00 #	- 47 41 00 * - 64 16 00 * 05 00 00 * 01 50 00 * 36 30 00 *	
MANHTN M KAN MLWKEE A WIS CH1 CPLN ILL N CANTON A O ST COLL P PA	39 12 12 N 42 58 07 N 41 51 58 N 40 55 54 N 40 44 00 N	263 56 12 271 51 05 272 23 35 278 32 40 282 06 33	366 294 194 366 393	07 47 02.20 07 47 34.00 07 47 42.00 07 48 07.50 07 49 09.00	003 45 00 * 001 33 00 * 001 42 08 * 023 22 00 * 022 51 00 *	47 30 00 * 47 30 00 * 50 32 00 * 57 50 00 * 40 00 00 *	
FT 8ELVR VA AMES A IOWA WPALMS A FLA WPALMS A FLA WPALMS A FLA	38 45 30 N 42 01 59 N 26 39 30 N 26 39 30 N 26 39 30 N	282 48 42 266 22 00 279 55 20 279 55 20 279 55 20	85 305 5 5	07 49 26.00 07 49 55.00 07 53 41.88 07 54 13.89 07 54 26.00	000 00 00 100 00 00 002 13 00 * 002 13 06 * 090 00 00	83 00 00 26 00 00 20 29 00 * 13 23 00 * 48 00 00 .	
WPALMB A FLA CURACAO NWI CURACAO NWI AMES A IOWA AMES A IOWA	26 39 30 N 12 05 50 N 12 05 50 N 42 01 59 N 42 01 59 N	279 55 20 291 09 46 291 09 46 266 22 00 266 22 00	5 7 7 305 305	07 55 01.89 07 58 08.46 08 00 02.28 09 28 43.00 09 29 53.00	002 14 06 * 001 21 42 * 001 49 06 * 305 30 00 302 30 00	24 59 00 #	111
AMES A IOWA AMES IOWA AMES IOWA AMES A IOWA MANHTN A KAN	42 01 59 N 42 01 43 N 42 01 43 N 42 01 59 N 39 15 58 N	266 22 00 266 20 59 266 20 59 266 22 00 263 22 38	3 05 3 05 4 08	09 30 46.00 09 30 52.00 09 31 27.00 09 31 55.00 09 32 13.00	297 00 00 018 39 53 4 019 18 06 4 276 30 00 020 26 00 4	20 50 48 * 41 42 00	
AMES A IOWA AMES IOWA CHI CPLN ILL MLWKEE A WIS AMES IOWA	42 01 59 N 42 01 43 N 41 51 58 N 42 58 07 N 42 01 43 N	266 22 00 266 20 59 272 23 35 271 51 05 266 20 59	305 194 294	09 32 51.00 09 33 13.00 09 33 29.00 09 33 36.30 09 33 38.00	256 30 00 021 03 18 9 020 18 34 9 020 42 00 9 021 24 42 9	07 01 00 9	t t
AMES A IOWA OALLAS P TEX OANVILLE ILL AMES A IOWA FT WTH A TEX	42 01 59 N 32 51 10 N 40 08 57 N 42 01 59 N 32 42 27 N	266 22 00 263 14 29 272 22 26 266 22 00 262 38 14		09 33 57.00 09 34 49.50 - 09 34 53.00 09 34 59.00 09 36 08.00	232 00 00 146 30 00	28 00 00 38 06 00	
AMES A IOWA BRYAN TEX AMES A IOWA WPALMB B FLA WPALMB 8 FLA	42 01 59 N 30 38 14 N 42 01 59 N 27 00 00 N 27 00 00 N	279 51 00	92 305	09 36 17.00 09 36 46.80 09 37 37.00 09 37 56.49 09 38 12.50	023 37 08 168 00 00 020 38 30	22 42 00 * 05 00 00	*

STATION	LAT ITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION S OR R DECLINATION* 1
			26 JLY 1958	(CONT)		
BRYAN TEX WPALMB 8 FLA HUANCAYO PER HUANCAYO PER ALMGROO A NM	30 38 14 N 27 00 00 N 12 01 27 S 12 01 27 S 32 52 24 N	263 39 58 279 51 00 284 40 28 284 40 28 254 02 58	92 3476 3476 1335	09 38 19.50 09 38 28.50 09 52 00.00 09 54 00.00 11 16 51.00	023 43 00 * 020 51 06 * 023 15 00 * 000 05 00 * 019 10 00 *	25 10 00 # 01 53 00 # 06 00 00 # - 34 00 00 # 20 24 00 #
ALMGROO A NM EL PASO TEX -ALMGROO A NM EOW AF O CAL EDW AF O CAL	32 52 24 N 31 49 41 N 32 52 24 N 34 56 43 N 34 56 43 N	254 02 58 253 36 36 254 02 58 242 04 58 242 04 58	1335 1335 785 785	11 18 25.00 11 18 43.00 11 20 17.00 11 26 13.00 11 27 13.00	019 52 00 # 268 30 00 020 50 00 # 170 43 12 169 19 30	11 24 00 # 27 00 00 - 04 00 00 # 10 06 36 06 50 16
EOW AF O CAL EOW AF O CAL KAGOSHIMA J ASAHIKAWA J KAGOSHIMA J	34 56 43 N 34 56 43 N 31 31 34 N 43 46 27 N 31 31 34 N	242 04 58 242 04 56 130 31 47 142 21 50 130 31 47	785 785 13 113	11 28 13.00 11 28 41.00 18 11 14.00 18 13 34.00 18 13 47.00	168 18 00 167 40 12 000 14 00 * 022 48 00 * 000 54 00 *	03 54 36 02 28 12 15 00 00 # - 31 00 00 # - 12 00 00 #
MIYAZAKI J MIYAZAKI J TAIPEI TAIWN AOLAIO C AUS JOKNN OB FIN	31 55 23 N 31 55 23 N 25 02 42 N 34 44 00 S 60 48 50 N	131 25 24 131 25 24 121 30 02 136 40 00 023 30 09	8 8 22 103	18 16 50.00 18 17 31.00 19 29 43.60 20 18 52.00 21 19 57.70	001 22 00 * 001 27 00 * 022 27 00 * 001 00 00 * 302 00 00	- 35 00 00 # - 37 00 00 # - 22 42 00 # - 47 30 00 # 14 24 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 20 06.50	302 48 00	15 48 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 20 15.30	303 54 00	17 18 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 20 23.70	305 24 00	18 34 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 20 32.30	306 36 00	20 30 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 20 40.50	308 12 00	22 06 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 20 50.10	310 00 00	24 12 00
	60 48 50 N	^23 30 09	103	21 20 58.70	312 00 00	26 00 00
	60 40 50 N	023 30 09	103	21 21 07.90	314 24 00	28 12 00
	60 48 50 N	023 30 09	103	21 21 42.90	326 30 00	38 06 00
	60 48 50 N	023 30 09	103	21 21 51.30	331 12 00	40 18 00
JO GARA OB FIN	60 48 50 N	023 30 09	103	21 22 00.50	337 00 00	43 06 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 22 08.50	342 00 00	44 48 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 22 16.30	348 36 00	47 12 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 23 00.50	027 36 00	50 18 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 23 08.50	034 48 00	49 18 00
JC'NN OB FIN	60 48 50 N	023 30 09	103	21 23 16.30	040 42 00	48 00 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 23 23.30	045 54 00	46 42 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 23 30.90	050 30 00	45 18 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 23 36.90	054 00 00	43 54 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 23 42.50	056 54 00	42 36 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 23 48 • 30	059 30 00	41 18 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 23 53 • 90	061 00 00	40 00 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 23 59 • 70	063 18 00	38 42 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 24 07 • 10	066 54 00	37 06 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 24 12 • 10	069 12 00	35 36 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 24 19•70	070 42 00	34 24 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 24 26•10	072 24 00	33 18 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 24 32•70	074 00 00	31 54 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 24 38•70	075 18 00	30 48 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 24 44•90	076 30 00	29 42 00
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N	023 30 09	103	21 24 51.10	077 48 00	28 42 00
	60 48 50 N	023 30 09	103	21 24 57.90	078 48 00	27 36 00
	60 48 50 N	023 30 09	103	21 25 04.90	079 54 00	26 36 00
	60 48 50 N	023 30 09	103	21 25 12.30	061 00 00	25 30 00
	60 48 50 N	023 30 09	103	21 25 19.30	082 00 00	24 24 00
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 25 26.42 21 25 39.42 21 25 47.18 21 25 56.42 21 26 02.70	082 54 00 083 48 00 085 12 00 086 00 00 086 36 00	23 24 00 22 24 00 20 48 00 19 48 00 19 06 00
JOKNN OB FIN	60 46 50 N	023 30 09	103	21 26 09.90	087 12 00	18 18 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 26 15.10	087 36 00	17 48 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 26 22.30	088 12 00	17 06 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 26 28.90	088 36 00	16 24 00
JOKNN OB FIN	60 48 50 N	023 30 09	103	21 26 36.50	089 06 00	15 48 00
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 26 43.30 21 26 50.90 21 26 58.30 21 27 05.10 21 27 11.70	090 00 00 090 24 00 090 48 00	15 06 00 14 24 00 13 48 00 13 12 00 12 42 00

STATION	LAT I TUOE	LONGITUOE	IN	IME GMT IN MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION*	SL RA I N
			26 JLY 1958 (C	ONT)			
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 21 103 21 103 21	27 19.90 27 27.90 27 37.10 27 47.30 27 53.90	091 36 00 092 00 00 092 24 00 092 48 00 093 06 00	12 06 00 11 30 00 10 48 00 10 06 00 09 42 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 21 103 21 103 21	27 59 • 90 28 07 • 30 28 14 • 30 28 22 • 30 28 30 • 30	093 18 00 093 36 00 093 48 00 094 06 00 094 18 00	09 18 00 08 48 00 08 18 00 07 54 00 07 24 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 21 103 21 103 21	28 39.50 28 48.70 28 58.30 29 06.50 29 15.90	094 36 00 094 54 00 095 12 00 095 24 00 095 42 00	06 48 00 06 18 00 05 48 00 05 18 00 04 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 23 103 23 103 23	29 24.90 05 05.30 06 40.70 07 32.30 07 59.70	096 00 00 300 06 00 295 18 00 288 24 00 278 36 00	04 18 00 11 36 00 28 18 00 46 24 00 56 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 23 103 23 103 23	08 03.90 09 10.30 09 25.30 09 34.10 09 41.30	275 24 00 185 36 00 156 42 00 161 06 00 156 36 00	60 06 00 70 00 00 65 30 00 62 30 00 59 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 23 103 23 103 23	3 09 51.40 3 09 56.70 3 10 02.70 3 10 08.10 3 10 16.50	152 30 00 150 24 00 149 06 00 147 30 00 145 42 00	56 24 00 54 18 00 52 18 00 50 12 00 47 54 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 23 103 23 103 23	3 10 26.10 3 10 33.30 3 10 42.10 3 10 48.90 3 10 56.70	143 54 00 1 54 00 141 48 00 141 00 00 140 06 00	44 54 00 43 00 00 40 48 00 39 06 00 37 24 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 23 103 23 103 23	3 11 03 • 30 3 11 11 • 10 3 11 15 • 50 3 11 26 • 70 3 11 35 • 70	139 42 00 139 06 00 138 36 00 138 00 00 137 24 00	35 54 00 34 24 00 33 00 00 31 30 00 30 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 23 103 23 103 23	3 11 43.50 3 11 51.30 3 12 00.70 3 12 09.90 3 12 18.50	137 06 00 136 42 00 136 18 00 135 54 00 135 30 00	28 42 00 27 30 00 26 12 00 25 00 00 23 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 23 103 23 103 23	3 12 26.70 3 12 37.30 3 12 46.10 3 12 55.30 3 13 03.90	135 24 00 135 06 00 134 48 00 134 36 00 134 24 00	22 54 00 21 36 00 20 42 00 19 36 00 18 48 00	
JOKNN CB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 23 103 23 103 23	3 13 12.90 3 13 20.70 3 13 30.10 3 13 38.70 3 13 46.90	134 12 00 134 06 00 133 54 00 133 48 00 133 42 00	17 54 00 17 12 00 16 24 00 15 42 00 15 00 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 23 103 23 103 23	3 13 55.10 3 14 04.70 3 14 09.50 3 14 23.10 3 14 32.10	133 30 00 133 24 00 133 18 00 133 12 00 133 06 00	14 18 00 13 30 00 12 48 00 12 12 00 11 30 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 23 103 23 103 23	3 14 40.70 3 14 49.50 3 14 58.70 3 15 42.70 3 15 52.90	133 00 00 132 54 00 132 48 00 132 36 00 132 24 00	11 00 00 10 18 00 09 48 00 07 06 00 06 30 00	
JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09		3 16 01.70 3 16 09.10	132 24 00 132 18 00	06 06 00 05 36 00	

				1			
STATION	LAT ITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GAT	AZIMUTH OR	ELEVATION OR	S'ANT RANG
		6001		HR MIN SEC	RGT ASCEN #	OECLINATION*	IN K.
141011 14 44	_		27 JLY 1958	3			
IKARIA IS GR IKARIA IS GR IKARIA IS GR IKARIA IS GR S FERNNOO SP	37 37 00 N 37 37 00 N 37 37 00 N 37 37 00 N 36 27 42 N	026 13 30 026 13 30 026 13 30 026 13 30 353 47 42	3 05 3 05 3 05 3 05 3 05	01 02 22.00 01 03 28.00 01 04 21.00 01 04 59.00 02 42 42.62	023 32 36 * 023 59 36 * 000 17 36 * 000 27 30 * 000 23 24 *	01 18 00 # 11 42 00 # 18 00 00 # 21 36 00 # 49 05 00 #	
CHELMSFO ENG EL GOLEA ALG EL GOLEA ALG EL GOLEA ALG OLFSFTN S AF	51 43 00 N 30 34 00 N 30 34 00 N 30 34 00 N 25 57 33 S	000 30 00 002 52 00 002 52 00 002 52 00 028 14 53	1544	02 44 04.00 02 49 00.00 02 51 00.00 02 53 00.00 03 01 51.26	022 57 00 * 153 24 00 153 24 00 153 24 00 025 16 18 *	- 18 00 00 * 30 00 00 19 48 00 10 54 00	
PRET B S AF UNION JOHSBG UNION JOHSBG BLOMFIN S AF PRET B S AF	25 43 43 S 26 10 55 S 26 10 55 S 29 06 19 S 25 43 43 S	028 12 42 028 04 30 028 04 30 026 13 35 028 12 42	1311 1806 1806 1634 1311	03 03 57.30 03 06 35.00 03 06 42.00 03 07 06.00 03 07 51.10	023 48 00 # 000 35 00 # 000 25 12 # 001 24 12 # 001 07 00 #	29 34 00 * 01 54 00 * - 29 04 48 * - 19 00 00 * - 23 28 00 *	
UNION JOHSBG UNION JOHSBG PRET B S AF S FERNNOO 3P MLWKEE A WIS	26 10 55 S 26 10 55 S 25 43 43 S 36 27 42 N 42 58 07 N	028 04 30 028 04 30 028 12 42 353 47 42 271 51 05	1806 1806 1311 30 294	03 07 53.00 03 08 17.00 03 09 46.60 04 28 06.43 06 01 57.50	001 20 00 * 001 31 00 * 002 39 00 * 019 52 12 * 036 12 00	- 46 42 00 * - 44 30 00 * - 49 18 00 * - 64 24 00 * 04 51 00 * 13 20 00	
CLEVELNO A O CLEVELNO A O CLEVELNO A O CLEVELNO A O	41 29 46 N 41 29 46 N 41 29 46 N 41 29 46 N 41 29 46 N	278 12 16 278 12 16 278 12 16 278 12 16 278 12 16	220 220 220 220 220	06 04 33.00 06 04 53.00 06 07 37.00 07 46 49.00 07 48 35.00	030 12 00 003 42 00 * 069 00 00 326 00 00 323 00 00	21 12 00 42 00 00 * 14 00 00 21 00 00 39 00 00	
CLEVELNO A O MLWKEE A WIS N CANTON A O ST COLL PA CLEVELNO A O	41 29 46 N 42 58 07 N 40 55 54 N 40 44 01 N 41 29 46 N	278 12 16 271 51 05 278 32 40 282 06 33 278 12 16	220 294 366 393 220	07 49 09.00 07 49 50.00 07 50 12.00 07 53 14.00 07 53 14.00	326 00 00 023 57 00 * 020 58 30 * 023 00 00 * 155 00 00	49 00 00 49 20 00 # 54 20 00 # 03 00 00 # 45 00 00	
CLEVELNO A O CLEVELNO A O CURACAO NWI CURACAO NWI SPOKN A WASH	41 29 46 N 41 29 46 N 12 09 04 N 12 09 04 N 47 37 37 N	278 12 16 278 12 16 291 03 28 291 03 28 242 38 59	220 220 5 6 706	07 53 57.00 07 55 08.00 08 04 26.05 08 04 58.65 09 31 08.00	153 00 00 151 36 00 001 20 00 # 001 31 18 # 045 00 00	37 CO OO 27 42 OO 29 20 OO * 33 31 58 * 78 30 OO	
MLWKEE A WIS SPOKN A WASH BTLSVL-A OKL ALBUQ-GS NM MCALLEN TEX	42 58 07 N 47 37 37 N 36 42 18 N 35 06 22 N 26 07 48 N	271 51 05 242 38 59 264 03 36 253 23 14 261 51 00	294 706 213 1565	09 32 35.00 09 33 04.00 09 36 13.50 09 38 07.00 09 40 25.80	284 06 00 000 13 00 * 020 47 00 * 000 35 00 * 150 00 00	15 30 00 15 00 00 * 16 48 00 * - 01 00 00 * 81 00 00	
WICHITA KAN PUEBLA P MEX WPALMB A FLA WLNTCK A CAL SAPPORO J	37 41 44 N 19 03 00 N 26 39 30 N 37 55 30 N 43 04 49 N	262 45 19 261 49 00 279 55 20 237 55 30 141 22 13	413 2200 5 10 20	09 40 43.30 09 41 10.50 09 43 55.00 11 18 54.50 16 22 40.00	023 32 18 * 000 02 06 * 224 00 00 020 41 00 * 014 47 00 *	- 28 24 00 * 27 34 00 * 21 00 00 15 30 00 * 76 00 00 *	
KANYAMACHI J KANYAMACHI J KASHIWABRA J YATSUSHIRO J KAGOSHIMA J	34 03 46 N 34 03 46 N 34 30 24 N 32 30 21 N 31 31 34 N	135 15 10 135 15 10 135 48 15 130 36 15 130 31 47	40 40 66 3 13	16 26 02.00 18 09 34.00 18 11 40.00 18 11 42.00 18 13 00.00	003 28 00 * 018 42 00 * 020 43 00 * 270 00 00 022 51 00 *	49 00 00 * 40 00 00 * 15 00 00 * 68 00 00 13 00 00 *	
KASHIWABRA J KAGOSHIMA J BERL RU GER	34 30 24 N 31 31 34 N 52 32 29 N	135 48 15 130 31 47 013 20 58	66 13 53	18 13 15 • 00 18 13 44 • 00 23 11 35 • 00	021 24 00 * 023 12 00 * 003 47 00 *	- 03 00 00 # 03 00 00 # 53 30 00 #	
			28 JLY 1958				
BERL RU GER BERL RU GER COPNGN B OEN BERL RU GER BERL RU GER	52 32 29 N 52 32 29 N 55 42 13 N 52 32 29 N 52 32 29 N	013 20 58 013 20 58 012 27 09 013 20 58 013 20 58	53 53 10 53 53	00 55 14.00 00 56 26.00 00 57 48.00 00 58 05.00 00 58 55.00	016 33 00 * 018 43 00 * 010 23 00 * 021 28 00 * 022 16 00 *	42 24 00 * 39 30 00 * 20 30 00 * 17 00 00 * 07 12 00 *	
BERL RU GER IKARIA IS GR BERL RU GER IKARIA IS GR IKARIA IS GR	52 32 29 N 37 37 00 N 52 32 29 N 37 37 00 N 37 37 00 N	013 20 58 026 13 30 013 20 58 026 13 30 026 13 30	53 305 53 305 305	00 59 43.00 01 00 42.00 01 00 53.00 01 01 08.00 01 01 45.00	022 48 00 # 019 15 36 # 023 17 00 # 019 50 48 # 020 30 00 #	- 01 30 00 * 43 06 00 * 09 30 00 * 38 18 00 * 31 18 00 *	
IKARIA IS GR IKARIA IS GR IKARIA IS GR IKARIA IS GR IKARIA IS GR	37 37 00 N 37 37 00 N 37 37 00 N 37 37 00 N 37 37 00 N	026 13 30 026 13 30 026 13 30 026 13 30 026 13 30	305 305 305 305 305	01 03 10 80 01 03 56 30 01 05 35 30 01 06 01 00 01 06 16 30	022 18 36 * 022 28 36 * 022 51 36 * 023 23 00 * 023 35 36 *	02 48 00 # - 00 36 00 # - 07 36 00 # - 18 36 00 # - 22 36 00 #	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT 1N METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
		;	28 JLY 1951	B (CONT)			
IKARIA IS GR IKARIA IS GR IKARIA IS GR S FERNNOO SP PRET B S AF	37 37 00 N 37 37 00 N 37 37 00 N 36 27 42 N 25 43 43 S	026 13 30 026 13 30 026 13 30 353 47 42 028 12 42	305 305 305 30 30	01 07 00.00 01 07 27.30 01 08 02.30 02 49 37.57 03 05 11.30	023 41 36 * 023 49 36 * 023 57 36 * 000 38 48 * 022 46 CO *	* 25 36 00 * * 28 54 00 * * 32 30 00 * * 21 20 00 * 12 24 00 *	
PRET B S AF UNION JOHSBG UNION JOHSBG UNION JOHSBG OLFSFTN S AF	25 43 43 S 26 10 55 S 26 10 55 S 26 10 55 S 25 57 33 S	C28 12 42 C28 04 30 C28 04 30 C28 04 30 C28 14 53	1311 1806 1806 1806 1544	03 07 20.90 03 07 33.90 03 08 27.80 03 09 52.90 03 10 04.86	023 18 00 # 023 24 00 # 023 38 00 # 000 03 00 # 073 59 10 #	- 19 54 00 * - 20 54 00 * - 34 42 00 * - 50 00 00 * - 53 07 00 *	
OLFSFTN S AF OLFSFTN S AF AMES A IOWA OENVR A COLO AMES A IOWA	25 57 33 S 25 57 33 S 42 01 59 N 39 44 52 N 42 01 59 N	028 14 53 028 14 53 266 22 00 255 03 24 266 22 00	1544 1544 305 1625 305	03 12 34.75 03 16 02.62 07 39 45.00 07 47 58.40 07 49 11.50	002 01 00 * 009 09 00 * 067 15 00 015 18 00 356 15 00	- 76 25 00 * - 74 24 00 * 41 00 00 20 24 00 - 42 12 00	
AMES IOWA AMES A IOWA MANHTN B KAN MANHTN B KAN AMES IOWA	42 01 43 N 42 01 59 N 39 13 51 N 39 13 51 N 42 01 43 N	266 20 59 266 22 00 263 22 54 263 22 54 266 20 59	305 409 409	07 50 02.50 07 50 05.00 07 50 19.70 07 50 25.00 07 50 37.00	000 10 32 * 015 15 00 027 28 00 030 00 00 00 00 00 00 00 00 00 00 00	75 23 27 * 54 42 00 39 56 00 40 01 12 62 21 24 *	٠
AMES A IOWA MANHTH B KAN MANHTH B KAN MLWKEE A WIS MANHTH B KAN	42 01 59 N 39 13 51 N 39 13 51 N 42 58 07 N 39 13 51 N	266 22 00 263 22 54 263 22 54 271 51 05 263 22 54	305 409 409 294 409	07 50 38.50 07 50 47.00 07 50 52.00 07 51 00.00 07 51 01.00	035 45 00 040 00 00 042 25 00 021 38 00 *	60 18 00 42 00 00 42 34 00 53 00 00 <b>*</b> 43 08 00	
MANHTN B KAN MANHTN B KAN AMES A IOWA AMES A IOWA AMES IOWA	39 13 51 N 39 13 51 N 42 01 59 N 42 01 59 N 42 01 43 N	263 22 54 263 22 54 266 22 00 266 22 00 266 20 59	409 409 305 305	07 51 10 00 07 51 19 00 07 51 22 00 07 52 06 00 07 52 15 00	049 52 00 053 44 00 070 15 00 095 45 00 000 46 30 *	43 31 00 43 43 00 61 06 00 54 54 00 27 29 11 *	
AMES A IOWA WASH BEHL OC AMES A IOWA WASH BEHL OC WASH BEHL DC	42 01 59 N 38 49 13 N 42 01 59 N 38 49 13 N 38 49 13 N	266 22 00 282 59 31 266 22 00 282 59 31 282 59 31	305 305	07 52 58.00 07 53 15.00 07 54 00.00 07 54 03.00 07 54 42.00	112 15 00 020 21 00 * 121 45 00 020 59 00 * 021 42 00 *	45 12 00 30 48 00 * 35 06 00 19 54 00 * 08 12 00 *	
AMES A IOWA WPALMB A FLA AMES A IOWA WPALMB A FLA WASH BEHL OC	42 01 59 N 26 39 30 N 42 01 59 N 26 39 30 N 38 49 13 N	266 22 00 279 55 20 266 22 00 279 55 20 282 59 31	305 5 305 5	07 55 02.00 07 55 28.39 07 55 44.00 07 55 44.38 07 55 45.00	127 15 00 022 50 24 * 130 15 00 023 05 06 * 022 53 00 *	27 36 00 54 57 00 * 23 18 00 50 27 00 * - 14 54 00 *	
WPALMS A FLA WPALMS A FLA OENVR A COLO OENVR A COLO ALMGOO-GS:NM	26 39 30 N 26 39 30 N 39 44 52 N 39 44 52 N 32 52 22 N	279 55 20 279 55 20 255 03 24 255 03 24 254 03 05	5 5 1625 1625 1339	07 56 00.38 07 57 12.00 09 34 06.81 09 34 07.20 09 35 38.00	023 17 42 * 270 00 00 301 18 00 301 30 00 019 26 00 *	45 41 00 * 78 00 00 39 27 00 39 45 00 62 19 00 *	
SACMTO E CAL ALBUO A NM ALMGOO-GS:NM MANHTN B KAN ALBUO-GS NM	38 32 55 N 35 05 03 N 32 52 22 N 39 13 51 N 35 06 22 N	238 14 51 253 21 24 254 03 05 263 22 54 253 23 14	15 1520 1339 409 1565	09 35 58.60 09 37 15.00 09 37 40.00 09 38 07.20 09 39 28.00	001 42 55 ** 021 52 00 ** 022 32 00 ** 020 53 00 ** 023 35 00 **	25 38 00 # 39 30 00 # 31 43 00 # = 00 45 00 # = 02 00 00 #	•
ALMGDO-GS NM ORGN PASS NM ORGN PASS NM ORGN PASS NM S AN RAFB TX	32 52 22 N 32 25 24 N 32 25 74 N 32 25 24 N 29 32 06 N	254 03 05 253 26 51 253 26 51 253 26 51 261 47 33	1339 1651 1651 1651 232	09 39 34.00 09 40 58.94 09 41 02.40 09 41 06.72 09 43 09.80	023 31 00 ** 000 06 24 ** 000 07 23 ** 000 08 30 ** 021 06 00 **	- 11 16 00 + 11 54 00 + 12 31 58 +	
MIYAZAKI J KONKO J KONKO J MIYAZAKI J YATSUSHIRO J	31 55 23 N 34 32 31 N 34 32 31 N 31 55 23 N 32 30 21 N	131 25 24 133 37 40 133 37 40 131 25 24 130 36 15	8 4 8 3	18 10 23.00 18 12 03.00 18 12 05.76 18 12 33.00 18 12 40.00	018 01 00 4 018 10 00 4 268 00 00 020 12 00 4 270 00 00	25 00 00 d 39 00 00	•
KAGOSHIMA J KANYAMACHI J KASAYIM KAGOSHIMA J	31 31 34 N 34 03 46 N 31 55 23 N 31 31 34 N	130 31 47 135 15 10 131 25 24 130 31 47	13 40 8 13	18 14 08:00 18 14 50:00 18 16 24:96 18 16 56:00	021 39 00 9 021 20 00 9 022 44 00 9 023 07 00	- 07 00 00 - 18 00 00	* .
IKARIA IS GR	37 37 00 N	026 13 30	29 JLY 1	. <b>958</b> 01 01 39.40	018 50 48	* 33 48 00	
IKARIA IS GR IKARIA IS GR IKARIA IS GR IKARIA IS GR	37 37 00 N 37 37 00 N 37 37 00 N	026 13 30 026 13 30 026 13 30	305 305 305 305	01 02 08.00 01 02 35.00 01 03 29.00 01 04 03.00	019 14 54 019 45 00 020 <b>32</b> 18	29 18 00 23 48 00 13 00 00	*

STATION	LATITUDE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLAN RANG IN K
			29 JLY 1958	R (CONT)	*		
IKARIA IS GR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	37 37 00 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	026 13 30 002 13 52 002 13 52 002 13 52 002 13 52	305 162 162 162 162	01 06 20.00 02 40 07.90 02 40 25.60 02 40 46.00 02 40 57.60	022 23 42 ** 289 46 00 287 09 00 283 42 00 281 26 00	- 17 06 00 * 14 20 00 15 51 00 17 28 00 18 23 00	
MEUOON FR MEUOON FR MEUOON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	02 41 12.10 02 41 27.20 02 41 40.50 02 41 57.90 02 42 14.50	278 47 00 275 48 00 272 56 00 269 02 00 265 15 00	19 31 00 20 38 00 21 30 00 22 41 00 23 42 00	
MEUOON FR MEUOON FR MEUOON FR MEUDON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 16 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	02 42 30.40 02 42 47.10 02 43 09.50 02 43 23.30 02 43 39.00	261 26 00 257 17 00 251 44 00 248 14 00 244 17 00	24 27 00 '25 10 00 25 51 00 26 05 00 26 12 00	
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	02 43 51.60 02 44 06.90 02 44 24.20 02 44 42.10 02 44 58.60	241 10 00 237 27 00 233 18 00 229 17 00 225 45 00	26 13 00 26 07 00 25 48 00 25 21 00 24 47 00	٠
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUGON FR	45 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	02 45 16.40 02 45 32.60 02 45 49.50 02 46 05.20 02 46 21.90	220 06 00 219 04 00 216 03 00 213 25 00 210 49 00	24 05 00 23 23 00 22 33 00 21 44 00 20 52 00	
MEUDON FR MEUOON FR MEUOON FR MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	02 46 38.10 02 46 54.90 02 47 13.30 02 47 29.30 02 47 47.70	208 27 00 206 08 00 203 50 00 201 58 00 199 58 00	20 00 00 19 03 00 18 00 00 17 07 00 16 04 00	
MEUDON FR MEUOON FR MEUOON FR MEUOON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	02 48 05.40 02 48 22.00 02 49 01.80 02 49 21.40 02 49 42.10	198 08 00 196 27 00 193 17 00 191 43 00 190 23 00	15 03 00 14 10 00 12 01 00 10 58 00 09 54 00	
CHI CPLN ILL MLWKEE A WIS CLEVELNO A O AMES A IOWA MLWKEE A WIS	41 51 58 N 42 58 07 N 41 29 46 N 42 01 59 N 42 58 07 N	272 23 35 271 51 05 278 12 16 266 22 00 271 51 05	194 294 220 305 294	06 06 33.00 05 06 43.00 06 09 13.00 07 47 52.50 07 48 03.40	003 28 12 * 003 08 00 * 078 00 00 330 15 00 320 18 00	47 15 00 * 43 00 00 * 32 00 00 19 00 00 16 30 00	
AMES A IOWA DENVR A COLO AMES A IOWA AMES A IOWA AMES IOWA	42 01 59 N 39 44 52 N 42 01 59 N 42 01 59 N 42 01 43 N	266 22 00 255 03 24 266 22 00 266 22 00 266 20 59	305 1625 305 305	07 49 12.50 07 50 02.00 07 50 13.00 07 51 06.00 07 51 21.00	333 15 00 029 30 00 339 15 00 351 45 00 022 11 25 *	32 42 00 30 36 00 47 42 00 65 06 00 62 00 56 **	
AMES A IOWA AMES A IOWA AMES IOWA TERRHAUT IND CHI CPLN ILL	42 01 59 N 42 01 59 N 42 01 43 N 39 31 38 N 41 51 58 N	266 22 00 266 22 00 266 20 59 272 36 10 272 23 35	305 305 155 194	07 51 42.00 07 52 26.00 07 52 40.00 07 52 41.10 07 52 48.00	022 15 00 098 15 00 023 31 19 * 270 00 00 021 26 03 *	76 12 00 75 42 00 32 52 41 * 82 16 48 31 59 00 *	
MANHTN A KAN AMES A IOWA CLEVELNO A O AMES A IOWA CLEVELNO A O	39 15 58 N 42 01 59 N 41 29 46 N 42 01 59 N 41 29 46 N	263 22 38 266 22 00 278 12 16 266 22 00 278 12 16	408 305 220 305 220	07 52 51.10 07 53 35.00 07 53 44.00 07 54 53.00 07 54 53.00	001 01 00 * 127 45 00 020 45 00 * 135 45 00 205 00 00	61 12 00 # 55 42 00 16 00 00 # 38 18 00 47 00 00	
CLEVELND A O AMES A IOWA CLEVELNO A O OENVR A COLO ALBUO~GS NM	41 29 46 N 42 01 59 N 41 29 46 N 39 44 52 N 35 06 22 N	278 12 16 266 22 00 278 12 16 255 03 24 253 23 14	220 305 220 1625 1565	07 55 55.00 07 56 48.00 07 57 24.00 09 36 03.00 09 36 13.00	190 00 00 139 15 00 178 00 00 271 30 00 019 40 00 *	38 00 00 24 42 00 28 00 00 43 18 00 42 00 00 *	
SACMTO E CAL OAVIS CAL TOKYO JAPAN TOKYO JAPAN TOKYO JAPAN	38 32 55 N 38 19 48 N 35 40 11 N 35 40 11 N 35 40 11 N	238 14 51 238 31 12 139 32 28 139 32 28 139 32 28	15 58 58 58	09 36 26.40 11 21 41.00 14 40 32.19 14 40 49.01 14 41 01.00	000 52 42 * 020 10 37 * 004 25 12 * 004 11 36 * 004 02 36 *	30 24 00 *  01 10 00 *  51 00 00 *  49 05 00 *	
MITAKA J SAPPORO J KANYAMACHI J TOKYO JAPAN MIZUKAIDO J	35 40 20 N 43 04 49 N 34 03 46 N 35 40 11 N 36 00 56 N	139 32 30 141 22 13 135 15 10 139 32 28 139 59 18	50 20 40 58 12	14 42 26.00 16 23 46.00 16 25 51.16 16 27 07.42 16 27 10.00	003 18 00 * 015 59 00 * 001 39 00 * 022 43 48 * 000 00 00	47 43 00 #  37 00 00 #  55 00 00 #  26 00 00 #  67 22 58 #  60 00 00	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION	SLANT RANGE IN KM
		2	29 JLY 1958	(CONT)		,	
KANYAMACHI J TOKYO JAPAN KAGO5HIMA J MIZUKAIOO J KAGO5HIMA J	34 03 46 N 35 40 11 N 31 31 34 N 36 00 56 N 31 31 34 N	135 15 10 139 32 28 130 31 47 139 59 18 130 31 47	40 58 13 12 13	16 27 18.00 16 27 25.42 16 27 30.00 16 28 04.00 16 29 58.00	001 39 00 * 023 06 54 * 002 52 00 * 045 00 00 00 002 10 00 *	62 00 00 * 61 42 00 * 52 24 00 * 74 00 00 *	
SENDAI J TOKYO JAPAN KONKO J KONKO J JOKNN OB FIN	38 15 22 N 35 40 11 N 34 32 31 N 34 03 46 N 60 48 50 N	140 51 56 139 32 28 133 37 40 135 15 10 023 30 09	45 58 4 40 103	16 30 04.00 16 31 14.01 18 12 09.00 18 13 18.00 21 25 13.10	144 48 00 003 00 00 * 270 00 00 019 41 00 * 313 54 00	48 36 00 03 34 00 *- 33 00 00 09 00 00 *- 39 06 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 25 21.50 21 25 27.70 21 25 38.30 21 25 47.60 21 25 56.70	316 24 00 318 36 00 321 18 00 326 00 00 330 42 00	42 18 00 45 30 00 48 54 00 53 18 00 56 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 26 0".90 21 26 14.10 21 26 57.93 21 27 04.70 21 27 11.60	336 46 00 345 00 00 055 48 00 064 18 00 070 54 00	60 36 00 64 36 00 67 06 00 65 12 00 62 36 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 27 18 80 21 27 25 16 21 27 33 76 21 27 40 55 21 27 46 80	075 30 00 080 42 00 085 06 00 087 36 00 089 54 00	60 00 00 57 42 00 54 24 00 52 06 00 49 48 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 27 53.70 21 28 02.50 21 28 10.60 21 28 18.60 21 28 29.80	091 54 00 094 00 00 095 12 00 096 24 00 098 12 00	47 36 00 44 54 00 42 36 00 40 30 00 37 36 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 28 40.80 21 28 48.70 21 28 56.70 21 29 04.10 21 29 13.30	099 36 00 100 24 00 101 18 00 101 54 00 102 42 00	35 06 00 33 30 00 31 54 00 30 30 00 28 54 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 29 22.70 21 29 29.40 21 29 35.90 21 29 43.60 21 29 51.60	103 24 00 103 54 00 104 18 00 104 42 00 105 06 00	27 24 00 26 24 00 25 30 00 24 18 00 23 18 00	
JOKNN 0B FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 30 01.50 21 30 09.60 21 30 16.40 21 30 24.60 21 30 33.30	105 36 00 106 00 00 106 18 00 103 42 00 107 00 00	22 06 00 21 06 00 20 18 00 19 24 00 18 3C 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 30 40.00 21 30 46.90 21 30 55.40 21 31 02.80 21 31 11.70	107 12 00 107 30 00 107 48 00 108 00 00 108 12 00	17 54 00 17 06 00 16 24 00 15 42 00 15 00 00	
JOKNN 09 FIN JOKNN 0B FIN JOKNN 0B FIN JOKNN 0B FIN JOKNN 0B FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 31 20.60 21 31 30.10 21 31 38.80 21 31 46.70 21 31 54.50	108 30 00 108 42 00 109 00 00 109 12 00 109 24 00	14 12 00 13 24 00 12 48 00 12 06 00 11 36 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 32 03.80 21 32 12.30 21 32 21.30 21 32 29.90 21 32 38.60	109 36 00 109 42 00 109 54 00 110 00 00 110 12 00	11 00 00 10 1e 00 09 42 00 09 06 00 08 36 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 32 47.70 21 32 56.20 21 33 06.20 21 33 15.20 21 33 23.30	110 36 00 110 48 00 110 54 00	08 06 00 07 30 00 06 54 00 06 24 00 06 00 00	
JOKNN OB FIN JOKNN OB FIN MIL RAO MASS MIL RAO MASS MIL RAO MASS	60 48 50 N 42 37 03 N 42 37 03 N	023 30 09 288 30 28 288 30 28	103 103 155 155 155	21 33 31.80 21 33 41.60 22 56 53.00 22 57 43.20 22 58 24.00	111 12 00 291 24 00 308 54 00	05 30 00 05 00 00 05 24 00 07 18 00 08 30 00	1289 1188 1184

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OFCLINATION*	SLANT RANGE IN KM
			29 JLY 1958	(CONT)			
MIL RAO MASS MIL RAO MASS BERLN SG GER MEUOON FR MEUOON FR	42 37 03 N 42 37 03 N 52 28 30 N 42 48 18 N 48 48 18 N	288 30 28 288 30 28 013 20 30 002 13 52 002 13 52	155 155 50 162 162	22 59 56.00 23 01 05.00 23 10 11.50 23 10 55.20 23 11 11.00	354 24 00 008 18 00 011 28 00 * 015 45 00 020 15 00	05 46 00 02 48 00 55 18 00 * 20 41 00 21 <b>25</b> 00	1465 1835
MEUOON FR MEUOON FR BERLN SG GER MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 52 28 30 N 48 46 18 N 48 48 18 N	002 13 52 002 13 52 013 20 30 002 13 52 002 13 52	162 162 50 162 162	23 11 22.90 23 11 32.40 23 11 40.20 23 11 47.70 23 11 57.00	023 47 00 026 40 00 357 48 00 031 11 00 034 02 00	21 56 00 22 15 00 43 12 00 22 37 00 22 47 00	
MEUOON FR MEUOON FR BERLN SG GER MEUOON FR BERLN SG GER	48 48 18 N 48 48 18 N 52 28 30 N 48 48 18 N 52 28 30 N	002 13 52 002 13 52 013 20 30 002 13 52 013 20 30	162 162 50 162 50	23 12 06 • 20 23 12 22 • 90 23 12 32 • 30 23 12 42 • 30 23 12 49 • 60	036 41 00 041 29 00 001 43 00 * 046 59 00 040 18 00	22 52 C0 22 46 00 74 00 00 * 22 30 00 53 42 00	
MEUOON FR BERLN SG GER MEUOON FR MEUOON FR MEUOON FR	48 48 18 N 52 28 30 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 013 20 30 002 13 52 002 13 52 002 13 52	162 50 162 162 162	23 12 58.60 23 13 02.90 23 13 15.10 23 13 26.40 23 13 41.20	051 16 00 001 04 C0 * C55 23 00 058 04 C0 061 22 00	22 00 C0 6G 12 00 * 21 29 00 21 03 00 2C 22 00	
BERLN SG GER BERLN SG GER MEUOON FR MEUOON FR MEUOON FR	52 28 30 N 52 28 30 N 48 48 18 N 48 48 18 N 48 48 18 N	013 20 30 013 20 30 002 13 52 002 13 52 002 13 52	50 50 162 162 162	23 13 50 60 23 13 58 60 23 13 58 70 23 14 09 70 23 14 28 10	000 44 00 * 082 42 00 065 01 00 067 13 00 07C 31 00	41 00 00 <b>*</b> 45 48 00 19 33 00 18 57 00 17 56 00	
BERLN SG GER MEUOON FR MEUOON FR BERLN SG GER MEUOON FR	52 28 30 N 48 48 18 N 48 48 18 N 52 28 30 N 48 48 18 N	013 20 30 002 13 52 002 13 52 013 20 30 002 13 52	50 162 162 50 162	23 14 35.70 23 14 51.80 23 15 01.70 23 15 07.50 23 15 10.40	094 24 00 074 30 00 076 00 00 100 48 00 077 17 00	39 06 00 16 40 00 16 04 00 34 00 00 15 34 00	
MEUOON FR MEUOON FR BERLN SG GER MEUOON FR BERLN SG GER	48 48 18 N 48 48 18 N 52 28 30 N 48 48 18 N 52 28 30 N	002 13 52 002 13 52 013 20 30 002 13 52 013 20 30	162 162 50 162 50	23 15 27.20 23 15 53.00 23 15 55.00 23 16 13.80 23 16 22.40	079 23 00 082 46 00 107 36 00 085 04 00 110 24 00	14 40 00 13 13 00 27 18 00 12 00 00 24 00 00	
MEUOON FR MEUOON FR BERLN SG GER MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 52 28 30 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 013 20 30 002 13 52 002 13 52	162 162 50 162 162	23 16 29.9C 23 16 55.30 23 17 13.50 23 17 22.6C 23 17 49.10	086 42 00 089 06 00 113 42 00 091 21 00 093 16 00	11 11 00 09 47 00 19 00 00 08 25 00 07 06 00	
MEUOON FR MEUDON FR BERLN SG GER	48 46 18 N 48 48 16 N 52 28 30 N	002 13 52 002 13 52 013 20 30	162 162 50	23 18 06.60 23 18 41.30 23 18 41.50	094 31 00 096 44 00 116 24 00	06 15 00 04 13 00 11 48 00	
BERLN SG GER	52 28 30 N	013 20 30	30 JLY 19 50	58 00 55 <b>3</b> 7•80	293 12 00	20 48 00	
BERLN SG GER LNOSTRT NETH BERLN SG GER BERLN SG GER	52 28 30 N 52 37 39 N 52 28 30 N 52 28 30 N	013 20 30 004 44 58 013 20 30 013 20 30	50 50 50	00 56 22.40 00 56 53.80 00 57 15.40 00 57 43.20	284 30 00 018 03 18 * 270 24 00 260 54 00	26 42 00	١.
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30 013 20 30 013 20 30	50 50 50 50	00 58 06.90 00 58 41.70 00 58 50.10 00 59 08.00 00 59 26.50	251 30 00 019 32 00 * 233 24 0C 226 06 00 218 54 00	39 12 00 15 00 00 * 40 18 00 40 00 00 39 00 00	•
LNOSTRT NETH BERLN SG GER BERLN SG GER BERLN SG GER MEUOON FR	52 37 39 N 52 28 30 N 52 28 30 N 52 28 30 N 48 48 18 N	004 44 58 013 20 30 013 20 30 013 20 30 002 13 52	50 50 50 162	00 59 33.70 00 59 56.60 01 00 17.20 01 00 35.80 01 00 46.20	022 09 00 * 202 12 00 203 24 00 199 06 00 141 29 00	06 06 00 4 36 42 00 34 36 00 32 48 00 40 32 00	
BERLN SG GER MEUOON FR IKARIA IS GR MEUOON FR BERLN SG GER	52 28 30 N 48 48 18 N 37 37 00 N 48 48 18 N 52 28 30 N	013 20 30 002 13 52 026 13 30 002 13 52 013 20 30	305 16 <b>2</b>	01 01 00.20 01 01 05.40 01 01 15.00 01 01 19.10 01 01 20.20	193 48 00 141 39 00 018 02 54 4 141 46 00 190 30 00	30 24 00 36 55 00 30 36 00 34 32 00 28 30 00	•
IKARIA IS GR BERLN SG GER MEUOON FR BERLN SG GER MEUOON FR	52 28 30 N 48 48 18 N	026 13 30 013 20 30 002 13 52 013 20 30 002 13 52	50 1 <b>62</b> 50	01 01 22.60 01 01 32.60 01 01 40.10 01 01 49.20 01 01 54.10		20 18 00 27 18 00 31 20 00 25 42 00 29 22 00	

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STATION	LATITUDE	LONGI TUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION#
			30 JLY 1958	G (CONT)		
BERLN SG GER IKARIA IS GR BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 37 37 00 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 026 13 30 013 20 30 013 20 30 013 20 30	50 305 50 50	01 02 05.20 01 02 16.00 01 02 24.90 01 02 38.60 01 02 51.00	184 18 00 018 58 00 * 182 00 00 180 30 00 179 06 00	24 06 00 23 06 00 * 22 30 0D 21 18 00 20 12 00
IKARIA IS GR BERLN SG GER MEUDON FR BERLN SG GER MEUDON FR	37 37 00 N 52 28 30 N 48 48 18 N 52 28 30 N 48 48 18 N	026 13 30 013 20 30 002 13 52 013 20 30 002 13 52	305 50 162 50 162	01 03 08.00 01 03 11.50 01 03 15.50 01 03 27.40 01 03 33.30	019 31 18 # 177 36 00 142 27 00 176 18 00 142 33 00	16 54 00 * 18 48 00 20 05 00 17 24 00 18 40 C0
IKARIA IS GR BERLN SG GER MEUDON FR BERLN SG GER BERLN SG GER	37 37 00 N 52 28 30 N 48 48 18 N 52 28 30 N 52 28 30 N	026 13 30 013 20 30 002 13 52 013 20 30 013 20 30	305 50 162 50	01 03 33.70 01 03 42.30 01 03 51.70 01 03 58.90 01 04 19.60	019 56 24 * 175 18 00 142 36 00 174 24 00 173 12 00	10 48 00 # 16 18 00 17 06 00 15 12 00 14 00 00
S FERNNDO SP JOHBG E S AF JOHBG C S AF MLWKEE A WIS WASH BEHL DC	36 27 42 N 26 08 00 S 26 07 00 S 42 58 07 N 38 49 13 N	353 47 42 028 01 00 028 00 00 271 51 05 282 59 31	30 1672 1615 294	02 47 06.32 03 10 20.20 03 11 03.60 06 06 57.40 06 08 05.00	021 29 42 * 022 00 00 * 021 58 00 * 002 40 00 * 002 24 00 *	02 23 00 * 39 24 00 * 47 12 00 * 44 50 00 * 75 00 00 *
WASH BEHL DC WASH BEHL DC WASH BEHL OC MLWKEE A WIS OENVR A COLO	38 49 13 N 38 49 13 N 38 49 13 N 42 58 07 N 39 44 52 N	282 59 31 282 59 31 282 59 31 271 51 05 255 03 24	294 1625	06 08 36.00 06 09 41.00 06 11 56.00 07 49 00.70 07 50 15.00	001 54 00 * 001 19 00 * 001 25 00 * 015 43 00 * 025 30 00	63 30 00 <b>*</b> 34 12 00 <b>*</b> 14 48 00 <b>*</b> 45 30 00 <b>*</b> 37 30 00
TERRHAUT IND MANHTN M KAN MANHTN A KAN MANHTN M KAN MANHTN M KAN	39 31 38 N 39 12 12 N 39 15 58 N 39 12 12 N 39 12 12 N	272 36 10 263 56 12 263 22 38 263 56 12 263 56 12	155 366 408 366 366	07 52 19.00 07 52 37.00 07 52 45.00 07 52 47.00 07 52 54.00	270 00 00 054 03 00 031 46 00 068 17 00 076 18 00	61 18 <b>0</b> 0 73 02 00 68 39 00 72 <b>5</b> 5 00 72 23 00
CHI CPLN IEL MANHTN M KAN MANHTN M KAN BRISTOL TENN COLL C ALAS	41 51 58 N 39 12 12 N 39 12 12 N 36 35 03 N 64 51 36 N	272 23 35 263 56 12 263 56 12 277 50 31 212 12 12	194 366 366 527 237	07 52 58:00 07 53 04:00 07 53 12:00 07 54 06:00 09 29 35:00	026 36 20 088 36 00 094 55 00 270 00 00 147 36 00	22 44 00 70 57 00 69 37 00 50 00 00 28 18 00
ALMGDD-GS∮NM SACMTO E CAL AREQUIPA PER AREQUIPA PER AREQUIPA PER	32 52 22 N 38 32 55 N 16 23 05 S 16 23 05 S 16 23 05 S	254 03 05 238 14 51 289 27 55 288 27 55 288 27 55	1339 15 2377 2377 2377	09 35 55.00 09 36 37.80 09 59 01.10 10 00 04.00 10 01 42.30	017 47 00 * 023 52 12 * 020 49 18 * 020 46 18 * 020 36 30 *	43 37 C0 + 25 41 00 + 31 58 00 + 40 08 00 + 51 55 00 +
SACMTO E CAL YOKKAICHI J TAKADA J CAMBR U ENG CAMBR U ENG	38 32 55 N 35 00 15 N 37 06 38 N 52 12 51 N 52 12 51 N	238 14 51 136 39 00 138 15 22 000 05 41 000 05 41	15 3 23 28 28	11 20 32.63 16 27 33.00 16 28 21.00 23 09 21.20 23 10 13.13	019 16 03 * 023 03 00 * 022 53 00 * 358 12 00 016 54 00	05 04 00 * 57 00 00 * 27 00 00 * 26 06 00 31 24 00
BONN B GER MEUDON FR MEUDON FR BILTHVN NETH MEUDON FR	50 43 45 N 48 48 18 N 48 48 18 N 52 08 27 N 48 48 18 N	007 05 47 002 13 52 002 13 52 005 12 46 002 13 52	62 162 162	23 10 15 80 23 10 21 30 23 10 36 20 23 10 47 80 23 10 57 40	001 25 00 * 009 30 00 013 53 00 002 12 54 * 020 28 00	02 18 00 * 22 33 00 23 49 00 58 42 00 * 25 13 00
CAMBR U ENG MEUDON FR BILTHVN NETH MEUDON FR BILTHVN NETH	52 12 51 N 48 48 18 N 52 08 27 N 48 48 18 N 52 08 27 N	000 05 41 002 13 52 005 12 46 002 13 52 005 12 46	28 162 162	23 11 12.30 23 11 12.90 23 11 20.50 23 11 29.20 23 11 39.00	041 30 00 025 30 00 003 08 18 * 030 50 00 005 00 00 *	33 06 00 26 01 00 66 54 00 * 26 37 00 61 30 00 *
MEUDON FR BILTHVN NETH MEUDON FR HARROGTE ENG CAMBR U ENG	48 48 18 N 52 08 27 N 48 48 18 N 53 59 00 N 52 12 51 N	002 13 52 005 12 46 002 13 52 358 26 00 000 05 41	162 162 28	23 11 42:00 23 11 56:60 23 11 57:00 23 12 04:00 23 12 04:10	035 05 00 002 00 00 * 040 05 00 001 24 00 *	26 53 00 55 48 00 * 27 04 00 34 00 00 * 30 24 00
BILTHVN NETH CHELMSFD ENG MEUDON FR HORSBRDG ENG BILTHVN NETH	52 08 27 N 51 43 00 N 48 48 18 N 50 53 00 N 52 08 27 N	005 12 46 000 30 00 002 13 52 000 15 00 005 12 46	162	23 12 05.30 23 12 06.00 23 12 13.10 23 12 14.00 23 12 14.10	000 58 48 * 001 55 00 * 045 09 00 055 00 00 001 40 36 *	52 54 00 * 42 00 00 * 26 54 00 28 00 00 50 00 00 *
MEUDON FR MEUDON FR BONN B GER CAMBR U ENG MEUDON FR	48 48 18 N 48 48 18 N 50 43 45 N 52 12 51 N 48 48 18 N	002 13 52 002 13 52 007 05 47 000 05 41 002 13 52	162 162 62 28 162	23 12 31.40 23 12 43.40 23 12 44.80 23 12 49.40 23 13 00.40	050 50 00 054 21 00 000 41 00 * 072 48 00 059 02 00	26 33 00 26 10 00 30 48 00 * 26 48 00 25 24 00

SLANT RANGE IN KM

STATION	LATITUOE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION#	SLANT RANGE IN KM
		•	30 JLY 1958	(CONT)			
BLARICM NETH MEUOON FR HORSBRDG ENG STEENWK NETH MEUDON FR	52 16 15 N 48 48 18 N 50 53 00 N 52 47 29 N 48 48 18 N	005 14 53 002 13 52 000 15 00 006 06 38 002 13 52	162 ·	23 13 05.00 23 13 16.00 23 13 17.00 23 13 19.30 23 13 35.80	001 10 00 * 063 00 00 00 00 00 58 00 * 067 44 00 - 0	34 00 00 <b>*</b> 24 39 00 25 00 00 37 48 00 <b>*</b> 23 32 00	
MEUOON FR CAMBR U ENG MEUOON FR MEUOON FR MEUDON FR	48 48 18 N 52 12 51 N 48 48 16 N 48 48 18 N 48 48 18 N	002 13 52 000 05 41 002 13 52 002 13 52 002 13 52	162 28 162 162 162	23 13 50 40 23 13 53 40 23 14 08 50 23 14 27 80 23 14 37 70	070 55 00 084 54 00 074 22 00 077 59 00 079 37 00	22 37 00 21 00 00 21 26 00 20 09 00 19 29 00	
MEUOON FR CAMBR U ENG MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 52 12 51 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 000 05 41 002 13 57 002 13 52 002 13 52	162 28 162 162 162	23 14 54 • 10 23 15 03 • 40 23 15 10 • 40 23 15 27 • 70 23 15 37 • 30	082 10 00 093 18 00 084 27 00 086 42 00 087 56 00	18 24 00 15 42 00 17 19 00 16 13 00 15 34 00	
MEUDON FR MEUOON FR MEUOON FR MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 007 13 52 007 13 52 007 13 52 002 13 52 002 13 52	162 162 162 162 162	23 15 48 • 30 23 16 03 • 90 23 16 21 • 10 23 16 30 • 70 23 16 47 • 70	089 08 00 090 48 00 092 31 00 093 19 00 094 55 00	14 55 00 13 57 00 12 56 00 12 20 00 11 20 00	
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	23 16 57 80 23 17 15 30 23 17 34 00 23 17 51 20 23 18 08 10	095 38 00 097 06 00 098 20 00 099 35 00 100 38 00	10 50 00 09 46 00 08 47 00 07 94 00 07 02 00	
MEUDON FR	48 48 18 N	002 13 52	162	23 18 34 • 60	102 09 00	05 43 00	
			31 JLY 195				
CAMBR U ENG CAMBR U ENG CAMBR U ENG MEUOON FR CAMBR U ENG	52 12 51 N 52 12 51 N 52 12 51 N 48 48 18 N 52 12 51 N	000 05 41 000 05 41 000 05 41 002 13 57 000 05 41	28 28 28 162 28	00 20 58.50 00 21 00.30 00 24 31.40 00 53 06.10 00 53 18.60	335 06 00 335 18 00 262 42 00 318 14 00 310 54 00	34 00 00 34 18 00 50 48 00 12 17 00 18 30 00	
MEUOON FR MEUOON FR MEUOON FR MEUDON FR CAMBR U ENG	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 52 12 51 N	002 13 52 002 13 52 002 13 52 002 13 52 000 05 41	162 162 162 162 28	00 53 21.20 00 53 36.10 00 53 54.10 00 54 03.10 00 54 11.50	317 57 00 317 34 00 316 52 00 316 17 00 307 24 00	14 08 00 16 29 00 19 56 00 22 42 00 27 36 00	
MEUDON FR MFUDON FR CAMAR U ENG MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 52 12 51 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 000 05 41 002 13 52 002 13 52	162 162 28 162 162	00 54 35,20 00 54 53.80 00 55 03.20 00 55 11.70 00 55 24.20	315 28 00 314 35 00 301 06 00 313 45 00 321 46 00	26 03 00 29 40 00 39 54 00 32 20 00 35 41 00	
MEUDON FR MEUDON FR CAMBR U ENG MEUDON FR CAMBR U ENG	48 48 18 N 48 48 18 N 52 12 51 N 48 48 18 N 52 12 51 N	002 13 52 002 13 52 000 05 41 002 13 52 000 05 41	162 162 26 162 28	00 55 38.30 00 55 49.70 00 56 00.50 00 56 03.30 00 56 06.50	311 46 00 310 21 00 280 30 00 308 57 00 280 30 00	38 38 00 42 21 00 59 18 00 45 31 00 59 18 00	
BILTHYN NETH BILTHYN NETH MEUDON FR MEUDON FR BILTHYN NETH	52 08 27 N 52 08 27 N 48 48 18 N 48 48 18 N 52 08 27 N	005 12 46 005 12 46 002 13 52 002 13 52 005 12 46	162 162	00 56 20.30 00 56 28.40 00 56 28.70 00 56 46.00 00 56 46.00	017 48 00 * 017 57 54 * 306 35 00 302 35 00 018 28 00 *	35 48 00 4 34 54 00 4 50 13 00 56 07 00 32 36 00 4	•
CAMBR U ENG MEUOON FR 81LTHYN NETH MEUOON FR CAMBR U ENG	52 12 51 N 48 46 19 N 52 08 27 N 48 48 18 N 52 12 51 N	000 05 41 002 13 52 005 12 46 002 13 57 000 05 41	28 162 162 28	00 56 48.60 00 56 58.90 00 57 03.40 00 57 15.70 00 57 25.20		68 42 00 60 44 00 29 48 00 66 49 00 65 36 00	
MEUOON FR MEUDON FR CAMBR U ENG MEUDON FR CAMBR U ENG	48 48 18 N 48 48 18 N 52 12 51 N 48 48 18 N 52 12 51 N	002 13 52 002 13 52 000 05 41 002 13 52 000 05 41	28 162	00 57 31.80 00 58 06.10 00 58 08.50 00 58 28.70 00 58 49.50	220 25 00 175 18 00 191 42 00	72 09 00 76 00 00 54 42 09 71 48 00 44 54 00	
MEUOON FR MEUDON FR MEUOON FR MEUOON FR CAMBR U ENG	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 52 12 51 N	002 13 52 002 13 52 002 13 52 002 13 52 000 05 41	162 162 162	00 58 50.60 00 59 06.80 00 59 20.60 00 59 33.10 00 59 41.10	169 21 00 165 44 00 163 15 00	64 40 00 59 46 00 55 48 00 52 22 00 35 00 00	
MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N			00 59 42.40 00 59 54.60	161 54 00	49 58 00 46 59 00	Ш,

STATION LATITUD	LONGITUDE E EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION#	SLANT RANGE IN KM
		31 JLY 1956	(CONT)			
MEUDON FR 48 48 18 MEUOON FR 48 48 18 MEUOON FR 48 48 13 CAMBR U ENG 52 12 51 MEUOON FR 48 48 18	N 002 13 52 N 002 13 52 N 000 05 41	162 162 162 28 162	01 00 03*10 01 00 20*80 01 00 29*70 01 00 35*90 01 00 44*20	158 46 00 157 40 00 157 00 00 155 18 00 156 04 00	44 01 00 41 23 00 39 42 00 27 12 00 37 03 00	
MEUDON FR 48 48 18 MEUDON FR 48 46 18 CAMBR U ENG 52 12 51 IKARIA IS GR 37 37 00 MEUDON FR 48 48 18	N 002 13 52 N 000 05 41 N 026 13 30	162 162 28 305 162	01 00 54.20 01 01 21.40 01 01 22.40 01 01 22.60 02 40 34.50	155 30 00 154 17 00 154 24 00 018 17 12 * 279 02 06	35 22 00 31 13 00 22 00 00 20 18 00 # 12 05 00	
MEUOON FR 48 48 18 MEUOON FR 48 48 18 MEUDON FR 48 48 18 MEUDON FR 48 48 18 MEUOON FR 48 46 18	N 002 13 52 N 002 13 52 N 002 13 52	162 162 162 162 162	02 40 54.10 02 41 12.10 02 41 29.50 02 42 29.80 02 42 49.70	275 52 00 272 50 00 269 48 00 258 51 00 255 03 00	13 06 00 13 53 00 14 40 00 16 27 00 16 48 00	
OLFSFTN S AF 25 57 33 WASH 8EHL OC 38 49 13 WASH 8EHL DC 38 49 13 WASH 8EHL DC 38 49 13 WASH 8EHL DC 38 49 13	3 N 282 59 31 3 N 282 59 31 3 N 282 59 31	1544	03 12 33.21 06 02 33.00 06 06 41.00 06 07 38.00 06 10 04.00	020 47 30 * 011 52 00 * 004 00 00 * 000 26 00 * 000 30 00 *	- 63 10 00 # 72 18 00 # 89 00 00 # 74 12 00 # 27 24 00 #	
WASH BEHL OC 38 49 1 SACMTO E CAL 38 32 5 OENVR A COLO 39 44 5; WASH BEHL OC 38 49 1 AREOUIPA PER 16 23 0	5 N 238 14 51 2 N 255 03 24 3 N 282 59 31	15 1625 2377	07 08 14.00 07 51 08.10 07 52 02.40 07 52 32.00 09 00 17.70	000 28 00 * 002 14 33 * 088 48 00 018 27 00 * 020 20 00 *.	59 48 00 * 23 26 00 * 48 30 00 20 00 00 * 44 32 00 *	
OENVR A COLO 39 44 5 SACMTO E CAL 38 32 5 OAVIS CAL 38 19 4 CAMBR U ENG 52 12 5 CAMBR U ENG 52 12 5	5 N 238 14 51 8 N 238 31 12 1 N 000 05 41	1625 15 28 28	09 34 58.22 09 35 10.30 11 17 52.80 11 53 18.60 11 54 11.50	271 18 00 022 13 23 # 018 06 48 # 130 54 00 127 24 00	26 30 00 37 29 00 * 14 18 00 * 18 30 00 27 36 00	
KANYAMACHI J 34 03 4 KASHIWABRA J 34 30 2 KASHIWABRA J 34 30 2 KASHIWABRA J 34 30 2 MITAKA J 35 40 2	4 N 135 48 15 4 N 135 48 15 4 N 135 48 15	40 66 66 66 50	16 23 57.00 16 24 43.00 16 24 52.70 16 25 00.00 16 26 03.00	015 20 00 * 017 13 48 * 017 31 00 * 017 43 54 * 309 42 00	73 00 00 # 58 36 00 # 58 14 00 # 57 51 00 # 57 12 00	
MIL RAO MASS 42 37 0 BERLN SG GER 52 28 3 BERLN SG GER 52 28 3 JOKNN 03 FIN 60 48 5 BERLN SG GER 52 28 3	00 N 013 20 30 00 N 013 20 30 00 N 023 30 07	155 50 50 103 50	21 14 07.00 21 24 42.80 21 25 08.40 21 25 43.90 21 25 44.10	035 36 00 014 45 00 022 57 00 310 00 00 003 15 00 *	07 12 00 22 18 00 23 06 00 63 00 00 51 00 00 *	1315
JOKNN 03 FIN 60 48 9 8FRLN SG GER 52 28 3 JOKNN 03 FIN 60 48 9 BERLN SG GER 52 28 3 JOKNN 08 FIN 60 48 9	30 N 013 20 30 50 N 023 30 09 30 N 013 20 30	103 50 103 50 103	21 25 52 20 21 25 52 30 21 26 00 30 21 26 4/30 21 26 52 30	312 54 00 037 09 00 315 24 00 052 39 00 105 24 00	68 12 00 23 12 00 72 36 00 21 06 00 73 36 00	
JOKNN OB FIN 60 48 JOKNN OB FIN 60 48 BERLN SG GER 52 28 JOKNN OB FIN 60 48 JOKNN OB FIN 60 48	50 N 023 30 09 30 N 013 20 30 50 N 023 30 09	103 103 50 103 103	21 27 00 • 20 21 27 10 • 40 21 27 11 • 60 21 27 18 • 60 21 27 26 • 20	110 00 00 112 00 00 058 21 00 113 18 00 114 18 00	69 06 00 65 00 00 19 48 00 61 06 00 57 48 00	
JOKNN OB FIN 60 48 8ERLN SG GER 52 28 JOKNN OB FIN 60 48 JOKNN OB FIN 60 48 JOKNN OB FIN 60 48	30 N 013 20 30 50 N 023 30 09 50 N 023 30 09	50 103 103	21 27 33 • 20 21 27 37 • 10 21 27 40 • 10 21 27 48 • 40 21 27 56 • 80	115 06 00 063 39 00 115 42 00 116 18 00 116 42 00	54 54 00 18 18 00 52 12 00 49 12 00 46 24 00	
BERLN SG GER 52 28 JOKNN 08 FIN 60 48 JOKNN 0B FIN 60 48 JOKNN 0B FIN 60 48 JOKNN 0B FIN 60 48	50 N 023 30 09 50 N 023 30 09 50 N 023 30 09	103 103 103	21 28 05.40 21 28 06.20 21 28 14.30 21 28 22.09 21 28 30.60	068 33 00 117 12 00 117 30 00 117 48 00 118 00 00	16 36 00 43 42 00 41 24 00 39 30 00 37 24 00	
BERLN SG GER 52 28 JOKNN 03 FIN 60 48 JOKNN 0B FIN 60 48 BERLN SG GER 52 28 JOKNN 0B FIN 60 48	50 N 023 30 09 50 N 023 30 09 30 N 013 20 30	103 103 50	21 28 31.00 21 28 39.00 21 28 49.00 21 28 51.00 21 28 57.80	072 27 00 118 12 00 118 30 00 075 09 00 118 42 00	15 00 00 35 30 00 33 30 00 13 48 00 31 42 00	
JOKNN OB FIN 60 48	50 N 023 30 09 50 N 023 30 09 50 N 023 30 09	9 103 9 103 9 103	21 29 07.30 21 29 17.00 21 29 26.30 21 29 33.90 21 29 45.20	118 54 00 119 00 00 119 12 00 119 18 00 119 30 00	30 06 00 28 30 00 27 00 00 25 54 00 24 18 00	

STATION	LATITUOE	LONG I TUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION#	SL/ RAN IN
			31 JLY 1958	(CONT.)			•
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103	21 30 00•20 21 30 13•70 21 30 24•50 21 30 38•90 21 30 51•50	119 42 00 119 54 00 120 00 00 120 06 00 120 12 00	22 30 00 20 54 00 19 42 00 18 18 00 17 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103	21 31 07.40 21 31 17.30 21 31 26.40 21 31 35.10 21 31 44.10	120 24 00 120 24 90 120 30 00 120 36 00 120 42 00	15 36 00 14 48 00 14 00 00 13 24 00	
JOKNN OB FIN MEUDON FR MEUDON FR JOKNN OB FIN MEUDON FR	60 48 50 N 48 48 18 N 48 48 18 N 60 48 50 N 48 48 18 N	023 30 09 002 13 52 002 13 52 023 30 09 002 13 52	162 162 103	21 32 00.80 23 08 56.49 23 09 20.40 23 09 28.90 23 09 31.10	120 48 00 001 06 00 007 47 00 263 36 00 011 05 00	12 42 00 11 30 00 23 21 00 26 01 00 28 54 00	
JOKNN OB FIN MEUDON FR JOKNN OB FIN JOKNN OB FIN MEUOON FR	60 48 50 N 48 48 18 N 60 48 50 N 60 48 50 N 48 48 18 N	023 30 09 002 13 52 023 30 09 023 30 09 002 13 52	162 193 103	23 09 36.50 23 09 45.60 23 09 46.70 23 09 56.90 23 09 58.40	261 12 00 015 51 00 257 42 00 254 06 00 020 13 00	27 06 00 29 54 00 28 24 00 31 00 00 32 00 00 29 29 00	
JOKNN OB FIN MEUDON FR JOKNN OB FIN JOKNN OB FIN MEUDON FR	60 48 50 N 48 48 18 N 60 48 50 N 60 48 50 N 48 48 18 N	023 30 09 002 13 52 023 30 09 023 30 09 002 13 52	162 103 103	23 10 06.20 23 10 15.20 23 10 16.80 23 10 30.30 23 10 31.10	250 42 00 026 11 00 246 36 00 240 48 00 032 10 00	32 48 00 30 37 00 33 48 00 34 42 00	
JOKNN C3 FIN BLARICM NETH JOKNN OB FIN MEUDON FR MEUDON FR	60 48 50 N 52 16 15 N 50 48 50 N 48 48 18 N 48 48 18 N	023 30 09 005 14 53 023 30 09 002 13 52 002 13 52	103 103 162	23 10 41.50 23 10 47.30 23 10 47.50 23 10 48.20 23 11 00.20	236 12 00 001 05 42 * 229 36 00 038 28 00 042 58 00	31 27 00 35 06 00 03 12 00 * 35 24 00 31 49 00 31 52 00	
MEUDON FR JOKNN OB FIN FASSBURG GER MEUDON FR JOKNN OB FIN	48 48 18 N 60 48 50 N 52 54 00 N 48 48 18 N 60 48 50 N	002 13 52 023 30 09 010 11 00 002 13 52 023 30 99	103	23 11 13.50 23 11 14.90 23 11 15.00 23 11 23.50 23 11 31.10	047 47 00 222 30 00 023 09 00 * 051 15 00 216 12 00	31 44 00 35 12 00 60 30 00 * 31 30 00 34 42 00	
MEUDON FR JOKNN 0B FIN MEUDON FR JOKNN 0B FIN MEUOON FR	48 48 18 N 60 48 50 N 48 48 18 N 60 48 50 N 48 48 16 N	002 13 52 023 30 09 002 13 52 023 30 09 002 13 52	103 162 103	23 11 39.10 23 11 41.90 23 11 49.60 23 11 51.30 23 12 00.30	056 32 00 212 18 00 059 53 00 209 06 00 063 08 00	30 55 00 34 12 00 30 25 00 33 42 00 29 51 00	
JOKNN 09 FIN JOKNN 08 FIN MEUSON FR JOKNN 08 FIN MEUSON FR	60 48 50 N 60 48 50 N 48 48 19 N 60 48 50 N 48 48 18 N	023 30 09 023 30 09 002 13 52 023 30 09 002 13 52	103 162 103	23 12 00.80 23 12 10.80 23 12 15.90 23 12 19.50 23 12 26.10	206 00 00 202 48 00 067 35 00 200 30 00 070 17 00	32 54 00 32 12 00 28 47 00 31 30 00 28 06 00	
JOKNN OB FIN MEUOON FR OLST NETH JOKNN OB FIN MEUDON FR	60 48 50 N 48 46 18 N 52 19 51 N 60 48 50 N 48 48 18 N	023 30 09 002 13 52 006 06 28 023 30 09 002 13 52	162	23 12 29.80 23 12 36.70 23 12 40.40 23 12 42.70 23 12 51.30	197 30 00 072 55 00 001 20 42 # 194 12 00 076 14 00	30 30 00 27 17 00 47 42 00 * 29 24 00 26 12 00	
JOKNN OB FIN MEUDON FR JOKNN OB FIN JOKNN OB FIN	60 48 50 N 48 48 18 N 60 48 50 N 48 48 18 N 60 48 50 N	023 30 09 002 13 52 023 30 09 002 13 52 023 30 09	162 103 162	23 12 52.60 23 13 02.30 23 13 04.20 23 13 17.00 23 13 17.40	191 54 00 078 35 00 189 24 00 081 32 00 186 48 00	28 24 00 25 55 00 27 24 00 24 09 00 26 06 00	
JOKNN 03 FIN MEUDON FR JOKNN OB FIN MEUDON FR MEUDON FR	60 48 50 N 48 48 18 N 60 48 50 N 48 48 18 N 48 48 18 N	023 30 09 002 13 52 023 30 09 002 13 52 002 13 52	162 103 162	23 13 31.10 23 13 34.90 23 13 44.70 23 13 44.80 23 13 54.70	184 18 00 084 42 00 182 06 00 086 18 00 087 52 00	24 48 00 22 44 00 23 36 00 21 57 00	
JOKNN OB FIN MEUOON FR MEUDON FR JOKNN OB FIN MEUOON FR	60 48 50 N 48 46 18 N 48 48 18 N 60 43 50 N 48 48 18 N	023 30 09 002 13 52 002 13 52 023 30 09 002 13 52	103 162 162 103	23 14 02 • 80 23 14 03 • 30 23 14 12 • 00 23 14 13 • 60 23 14 20 • 80	179 30 00 089 07 00 090 18 00 178 06 00 091 27 00	21 12 00 21 54 00 20 31 00 19 50 00 21 06 00	
JOKNN OB FIN MEUDON FR MEUOON FR BERLN SG GER MEUOON FR	50 48 50 N 48 48 18 N 48 48 16 N 52 28 30 N 48 48 18 N	023 30 09 002 13 52 002 13 52 013 20 30 002 13 52	103 162 162 50	23 14 21.90 23 14 30.20 23 14 40.90 23 14 46.50 23 14 55.60	177 06 00 092 38 00 093 52 00 127 45 44 095 27 00	19 12 00 20 24 00 18 29 00 17 42 00 30 12 00 16 41 00	

		LONGITUDE	HEIGHT IN	TIME GMT	AZIMUTH OR	ELEVATION OR	SLANT
STATION	LATITUDE	EAST		HR MIN SEC	RGT ASCEN *	DECLINATION*	IN KM
			31 JLY 1958	(CONT)			
BERLN SG GER MEUOON FR BERLN SG GER MEUDON FR BERLN SG GER	52 28 30 N 48 48 18 N 52 23 30 N 48 48 18 N 52 28 30 N	013 20 30 002 13 52 013 2C 30 002 13 52 013 20 30	50 162 50 162 50	23 14 58.90 23 15 06.10 23 15 14.10 23 15 15.40 23 15 26.30	128 03 44 096 36 00 128 51 44 097 30 00 129 15 44	28 18 00 15 57 00 26 30 00 15 15 00 25 00 00	
MEUOON FR BERLN SG GER MEUOON FR BERLN SG GER MEUDON FR	48 48 18 N 52 28 30 N 48 48 18 N 52 28 30 N 48 48 18 N	002 13 52 013 20 30 002 13 52 013 20 30 002 13 52	162 50 162 50 162	23 15 31.30 23 15 37.60 23 15 47.10 23 15 49.30 23 15 58.60	093 56 00 129 45 44 100 16 00 130 03 44 101 10 00	14 15 00 23 48 00 13 13 00 22 36 00 12 31 00	
BERLN SG GER MEUDON FR BERLN SG GER BERLN SG GER MEUDON FR	52 28 30 N 48 48 18 N 52 28 30 N 52 28 30 N 48 48 18 N	013 20 30 002 13 52 013 20 30 013 20 30 002 13 52	50 162 50 50 162	23 16 06.30 23 16 15.10 23 16 17.50 23 16 31.10 23 16 33.50	130 27 44 102 26 00 130 39 44 131 03 44 103 39 00	20 48 00 11 30 00 19 48 00 18 30 00 10 26 00	
BERLN SG GER MEUOON FR	52 28 30 N 48 48 18 N	013 20 30 002 13 52	50 162	23 16 45.00 23 16 59.30	131 21 44 105 27 00	17 12 00 08 54 00	
			1 AUG 1958	3			
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 53 02 80 00 53 20 70 00 53 34 60 00 53 47 40 00 54 00 90	312 09 00 310 57 00 309 54 00 308 45 00 307 25 00	18 36 00 21 15 00 23 28 00 25 38 00 28 08 00	
MEUDON FR MEUOON FR MEUOON FR MEUOON FR MEUDON FR	48 48 18 N 48 48 16 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 54 14.50 00 54 24.70 00 54 36.50 00 54 52.10 00 55 11.40	305 49 00 304 25 00 302 40 00 299 52 00 295 20 00	30 47 00 32 52 00 35 27 00 39 10 00 43 57 00	5 =
MEUDON FR BERLN SG GER MEUDON FR MEUDON FR BILTHVN NETH	48 48 18 N 52 28 30 N 48 48 18 N 48 48 18 N 52 08 27 N	002 13 52 013 20 30 002 13 52 002 13 52 005 12 46	162 50 162 162	00 55 23.90 00 55 40.50 00 55 40.80 00 55 51.80 00 55 53.60	291 54 00 265 55 00 286 01 00 280 59 00 018 38 00 #	47 06 00 24 42 00 51 31 00 54 24 00 23 12 00	*
BERLN SG GER MEUDON FR BILTHVN NETH BERLN SG GER BERLN SG GER	52 28 30 N 48 48 18 N 52 08 27 N 52 28 30 N 52 28 30 N	013 20 30 002 13 52 005 12 46 013 20 30 013 20 30	50 162 50 50	00 55 56.50 00 56 04.60 00 56 11.20 00 56 12.40 00 56 25.10	261 37 00 274 02 00 019 01 30 * 257 19 00 253 49 00	25 49 00 57 24 00 00 18 00 26 49 00 27 18 00	*
MEUOON FR BILTHVN NETH BERLN SG GER MEUOON FR BERLN SG GER	48 48 18 N 52 08 27 N 52 28 30 N 48 48 18 N 52 28 30 N	002 13 52 005 12 46 013 20 30 002 13 52 013 20 30	162 50 162 50	00 56 25 • 70 00 56 28 • 60 00 56 37 • 20 00 56 42 • 60 00 56 48 • 10	259 25 00 019 22 42 * 250 19 00 244 53 00 247 19 00	61 32 00 17 06 00 27 48 00 63 25 00 28 00 00	•
MEUDON FR BERLN SG GER MEUDON FR BERLN SG GER BERLN SG GER	48 48 18 N 52 28 30 N 48 48 18 N 52 28 30 N 52 28 30 N	002 13 52 013 20 30 002 13 52 013 20 30 013 20 30	162 50 162 50 50	00 56 57.40 00 57 02.90 00 57 13.30 00 57 15.80 00 57 27.50	231 29 00 243 01 00 217 45 00 239 13 00 235 01 00	63 33 00 28 12 00 62 29 00 28 18 00 28 12 00	
MEUDON FR BERLN SG GER MEUDON FR BERLN SG GER MEUDON FR	48 48 18 N 52 28 30 N 48 48 18 N 52 28 30 N 48 48 18 N	002 13 52 013 20 30 002 13 52 013 20 30 002 13 52	162 50 162 50 162	00 57 27.50 00 57 39.70 00 57 40.00 00 57 53.30 00 57 57.10	207 20 00 232 37 00 199 35 00 229 25 00 191 16 00	60 28 00 28 00 00 58 14 00 27 48 00 54 45 00	
BERLN SG GER BERLN SG GER MEUOON FR BERLN SG GER MEUOON FR	52 28 30 N 52 28 30 N 48 48 18 N 52 28 30 N 48 48 18 N	013 20 30 013 20 30 002 13 52 013 20 30 002 13 52	50 50 162 50 162	00 58 07.60 00 58 18.30 00 58 24.80 00 58 28.60 00 58 36.40	225 55 00 223 19 00 181 45 00 220 55 00 178 48 00	27 12 00 27 00 00 48 54 00 26 30 00 46 36 00	
BERLN SG GER MEUDON FR BERLN SG GER BERLN SG GER MEUOON FR	52 28 30 N 48 48 18 N 52 28 30 N 52 28 30 N 48 48 18 N	013 20 30 002 13 52 013 20 30 013 20 30 002 13 52	- 50 162 50 50 162	00 58 39.70 00 58 50.00 00 58 50.80 00 59 03.70 00 59 04.10	218 25 00 175 54 00 216 07 00 213 31 00 173 24 00	26 00 00 43 55 00 25 18 00 24 48 00 41 18 00	
BERLN SG GER MEUOON FR BERLN SG GER MEUDON FR MEUOON FR	52 28 30 N 48 48 18 N 52 28 30 N 48 48 18 N 48 48 18 N	013 20 30 002 13 52 013 20 30 002 13 52 002 13 52		00 59 17.30 00 59 18.50 00 59 29.00 00 59 32.40 00 59 44.50		24 00 00 38 47 00 23 18 00 36 30 00 34 39 00	
DENVR A COLO	39 44 52 N	255 03 24	1625	02 32 51 • 00	276 18 00	20 00 00	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			1 AUG 1958	(CONT)			
OLFSFTN S AF PRET B S AF OLFSFTN S AF OLFSFTN S AF MLWKEE A WIS	25 57 33 S 25 43 43 S 25 57 33 S 25 57 33 S 42 58 07 N	028 14 53 028 12 42 028 14 53 028 14 53 271 51 05	1544 1311 1544 1544 294	03 07 17.80 03 11 01.00 03 11 11.60 03 12 23.36 04 19 37.80	019 17 36 * - 020 26 00 * 020 17 00 * 017 31 54 * 047 00 00	- 57 31 00 * - 57 12 00 * - 58 19 00 * - 72 54 00 * 09 00 00	
OENVR A COLO DUNLAP ONTAR MLWKEE A WIS CHI CPLN ILL BALTIMORE MO	39 44 52 N 43 51 46 N 42 58 07 N 41 51 58 N 39 24 28 N	255 03 24 280 34 40 271 51 05 272 23 35 283 24 35	1625 244 294 194 144	06 00 21.50 06 03 34.27 06 04 01.50 06 05 04.80 06 06 15.00	043 45 00 016 45 01 * 027 00 00 001 41 41 * 000 00 00	13 15 00 74 24 00 * 40 45 00 55 11 30 * 61 00 00	
SPOKN A WASH PORTLANO ORE OENVR A COLO SACMTO E CAL MLWKEE A WIS	47 37 37 N 45 29 19 N 39 44 52 N 38 32 55 N 42 58 07 N	242 38 59 237 22 27 255 03 24 238 14 51 271 51 05	706 46 1625 15 294	07 42 42.00 07 46 03.00 07 48 02.00 07 49 04.60 07 50 11.80	011 00 00 * 002 20 30 * 345 30 00 002 09 16 * 255 00 00	56 30 00 # 50 00 00 # 31 30 00 30 08 00 # 37 45 00	
PORTLAND ORE SACMTO E CAL MEUDON FR YOKKAICHI J MIL RAO MASS	45 29 19 N 38 32 55 N 48 48 18 N 35 00 15 N 42 37 C3 N	237 22 27 238 14 51 002 13 52 136 39 00 288 30 28	46 15 162 3 155	09 30 43.00 09 32 06.90 13 07 29.80 16 23 39.00 21 10 54.91	018 25 20 * 013 42 07 * 003 56 00 018 04 00 * 023 54 00	37 30 00 * 53 49 00 * 29 02 00 58 00 00 * 15 18 00	
MIL RAO MASS JOKNN OS FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	42 37 03 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	288 30 28 023 30 09 023 30 09 023 30 09 023 30 09	155 103 103 103 103	21 12 59 • 32 21 20 24 • 80 21 20 34 • 00 21 20 41 • 60 21 20 51 • 50	030 12 00 300 54 00 300 42 00 300 30 00 300 30 00	02 30 00 15 54 00 17 18 00 18 30 00 20 30 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	6C 48 50 N 6C 48 50 N 6C 48 50 N 6C 48 50 N 6C 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 20 59.00 21 21 08.20 21 21 17.30 21 21 26.50 21 21 34.10	300 24 00 300 12 00 300 18 00 300 06 00 299 54 00	21 54 00 23 48 00 25 48 00 28 05 00 30 06 00	•
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 21 41.60 21 21 50.20 21 21 57.80 21 22 05.60 21 22 12.80	299 48 00 299 36 00 299 24 00 299 00 00 298 48 00	32 12 00 34 36 00 37 06 00 39 54 00 42 36 00	
JOKNN OB FIN JOKNN CE FIN JOKNN CE FIN JOKNN CE FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 22 21.30 21 22 31.40 21 22 38.20 21 22 48.00 21 22 54.50	298 24 00 297 42 00 297 12 00 296 06 00 295 12 00	45 54 00 50 18 00 53 24 00 58 18 00 61 36 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 23 02.70 21 23 10.90 21 23 19.40 21 23 32.00 21 24 07.50	293 24 00 290 48 00 286 18 00 269 12 00 135 30 00	66 17 00 71 54 00 75 54 00 82 48 00 78 54 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 24 29.50 21 24 36.20 21 24 44.20 21 24 52.60 21 25 00.00	131 00 00 130 30 00 129 48 00 129 00 00 128 36 00	63 24 00 60 18 00 57 00 00 53 36 00 51 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 25 07.60 21 25 16.20 21 25 23.00 21 25 33.40 21 25 41.20	128 12 00 127 42 00 127 30 00 127 12 00 127 00 00	48 30 00 45 54 00 43 48 00 41 00 00 39 06 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 25 48.80 21 25 57.10 21 26 05.40 21 26 13.60 21 26 24.00	126 24 00	37 18 00 35 30 00 33 48 00 32 12 00 30 30 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 26 34.50 21 26 44.50 21 26 53.40 21 27 02.60 21 27 13.20	126 06 00 126 00 00 125 54 00	28 42 00 27 12 00 25 48 00 24 42 00 23 12 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09	103	21 27 23 40 21 27 32 60 21 27 42 20 21 27 49 80 21 27 57 40	125 48 00 125 42 00 125 42 00	. 22 06 00 21 00 00 19 54 00 19 12 00 18 24 00	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR OECLINATION*	SLANT RANGE
VIAITON							110
			1 AUG 1958	•			
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 28 07.10 21 28 15.00 21 28 26.00 21 28 35.20 21.28 43.90	125 42 00 125 36 00 125 36 00 125 36 00 125 36 00	17 30 00 16 42 00 15 48 00 15 00 00 14 12 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 28 52.90 21 29 03.00 21 29 13.60 21 29 23.60 21 29 35.90	125 36 00 125 36 00 125 36 00 125 36 00 125 36 00	13 30 00 12 48 00 12 00 00 11 18 00 10 30 00	
JORNN OB FIN JORNN OB FIN JORNN OB FIN JORNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 29 46.40 21 29 56.60 21 30 06.80 21 30 19.40 21 30 29.40	125 36 00 125 36 00 125 36 00 125 36 00 125 36 00	09 48 00 09 06 00 08 30 00 07 48 00 07 06 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 20 09 023 30 09	103 103 103 103 103	21 30 38.70 21 30 49.50 21 30 58.00 21 31 07.80 21 31 16.80	125 36 00 125 36 00 125 36 00 125 36 00 125 36 00	06 36 00 06 00 00 05 30 00 05 00 00 04 36 00	
MEUOON FR MEUOUN FR JOKNN 03 FIN MEUDON FR JOKNN 08 FIN	48 48 18 N 48 48 18 N 60 48 50 N 48 48 18 N 60 48 50 N	002 13 52 002 13 52 023 30 09 002 13 52 023 30 09	162 162 103 162 103	23 06 13.70 23 06 39.40 23 06 55.10 23 06 58.10 23 07 03.50	346 09 00 351 06 00 273 18 00 355 23 00 271 06 00	18 45 00 22 08 00 21 48 00 24 42 00 22 36 00	
JOKNN OB FIN MEUDON FR JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 48 48 18 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 002 13 53 023 30 09 023 30 09	103 162 103 103 103	23 07 11.30 23 07 13.20 23 07 19.50 23 07 28.70 23 07 36.50	269 06 00 359 08 00 266 54 00 264 24 00 262 12 00	23 30 00 26 43 00 24 24 00 25 24 00 26 12 00	. •
JOKNN OB FIN MEUDON FR JOKNN OB FIN MEUOON FR JOKNN OB FIN	60 48 50 N 48 48 18 N 60 48 50 N 48 48 18 N 60 48 50 N	023 30 09 002 13 52 023 30 09 002 13 52 023 30 09	103 162 103 162 103	23 07 45.40 23 07 48.80 23 07 54.30 23 07 58.80 23 08 06.00	259 30 00 010 02 00 256 36 00 013 32 00 252 48 00	27 00 00 31 26 00 27 42 00 32 42 00 28 42 00	
MEUCON FR JOKAN OB FIN JOKAN OB FIN MEUDON FR JOKAN OB FIN	48 48 18 N 60 48 50 N 60 48 50 N 48 48 18 N 60 48 50 N	002 13 52 023 30 09 023 30 09 002 13 52 023 30 09	162 103 103 162 103	23 C8 12.70 23 08 15.30 23 08 23.10 23 C8 26.10 23 C8 33.30	019 06 00 249 36 00 247 00 00 024 06 00 243 24 00	34 15 00 29 24 00 29 48 00 35 23 00 30 24 00	
MEUDON FR JOKNN 03 FIN JOKNN 03 FIN MEUDON FR JOKNN 03 FIN	48 48 18 N 60 48 50 N 60 48 50 N 48 48 18 N 60 48 50 N	002 13 52 023 30 09 023 30 09 002 13 52 023 30 09	162 103 103 162 103	23 18 41.00 23 08 43.30 23 08 53.00 23 08 57.00 23 09 01.10	030 12 00 239 42 00 236 24 00 037 11 00 233 18 00	36 27 00 30 54 00 31 06 00 37 12 00 31 12 00	
JOKNN OB FIN MEUDON FR BLARICM NETH JOKNN OB FIN MEUDON FR	60 48 50 N 48 48 18 N 52 16 15 N 60 48 50 N 48 48 18 N	023 30 09 002 13 52 005 14 53 023 30 09 002 13 52	103 162 103 162	23 09 08.00 23 09 08.20 23 09 15.40 23 09 16.30 23 09 22.80	230 48 00 042 00 00 000 09 00 * 227 54 00 048 08 00	31 18 00 37 27 00 56 48 00 4 31 18 00 37 22 00	•
JOKNN OB FIN MEUOON FR BATTERSE ENG JOKNN OB FIN JOKNN OB FIN	60 48 50 N 48 48 18 N 51 28 00 N 60 48 50 N 60 48 50 N	023 30 09 002 13 52 359 51 00 023 30 09 023 30 09	103 162 103 103	23 09 24.60 23 09 33.60 23 09 34.00 23 09 35.10 23 09 43.70	225 12 03 052 38 00 000 54 00 * 221 36 00 218 42 00	31 06 00 37 08 00 38 06 00 30 54 00 30 36 00	-21
MEUOON FR JOKNN OB FIN JOKNN OB FIN MEUDON FR JOKNN OB FIN	48 48 18 N 60 48 50 N 60 48 50 N 48 48 18 N 60 48 50 N	002 13 52 023 30 09 023 30 09 002 13 52 023 30 09	162 103 103 162 103	23 09 52.00 23 09 55.50 23 10 05.30 23 10 10.20 23 10 15.70	059 49 00 215 00 00 212 06 00 066 17 00 209 06 00	36 17 00 30 06 00 29 36 00 35 08 00 29 00 00	
JOKNN OB FIN MEUOON FR JOKNN OB FIN JOKNN OB FIN MEUOON FR	60 48 50 N 48 48 18 N 60 48 50 N 60 48 50 N 48 48 18 N	023 30 09 002 13 52 023 30 09 023 30 09 002 13 52	103 162 103 103 162	23 10 24.50 23 10 27.20 23 10 33.50 23 10 42.40 23 10 42.70	206 42 00 071 48 00 204 24 00 202 06 00 076 16 00	28 30 00 33 42 00 27 54 00 27 18 00 32 13 00	
JOKNN OB FIN MEUOON FR JOKNN OB FIN MEUDON FR JOKNN OB FIN	48 48 18 N 60 48 50 N 48 48 18 N	023 30 09 002 13 52 023 30 09 002 13 52 023 30 09	103 162 103 162 103	23 10 50.80 23 10 54.70 23 11 02.40 23 11 05.00 23 11 16.40		26 36 00 31 11 00 25 48 00 30 09 00 24 42 00	

STATION	LAT ITUOE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLINT RANCE IN KA
			1 AUG 1958	(CONT)			
MEUOON FR JOKNN 09 FIN JOKNN 09 FIN MEUDON FR JOKNN 0B FIN	48 48 1F N 60 48 53 N 60 48 50 N 48 48 1F N 60 48 50 N	002 13 52 023 30 09 023 30 09 002 13 52 023 30 09	162 103 103 162 103	23 11 20 20 23 11 24 40 23 11 35 60 23 11 38 80 23 11 44 80	085 13 00 193 12 00 191 18 00 088 54 00 189 42 00	28 38 00 24 00 00 23 12 00 26 42 00 22 30 00	
JOKNN OB FIN MEUDON FR JOKNN OB FIN MEUDON FR JOKNN OB FIN	60 48 50 N 48 48 18 N 60 46 50 N 48 48 18 N 60 48 50 N	023 30 09 002 13 52 023 30 09 002 13 52 023 30 09	103 162 103 162 103	23 11 53.30 23 11 54.70 23 12 02.60 23 12 12.40 23 12 13.40	188 24 00 091 41 00 187 00 00 094 26 00 185 24 00	21 48 00 25 12 00 21 06 00 23 42 00 20 12 00	
MEUDON FR JOKNN OB FIN 'MEUDON FR JOKNN OB FIN	48 48 18 N 60 48 50 N 60 48 50 N 48 48 18 N 60 48 50 N	002 13 52 023 30 09 023 30 09 002 13 52 023 30 09	162 103 103 162 103	23 12 30.10 23 12 37.30 23 12 47.40 23 12 47.70 23 13 04.30	096 51 00 182 24 00 181 12 00 099 01 00 179 24 00	22 10 00 18 30 00 17 42 00 20 37 00 16 30 00	
MEUOON FR MEUDON FR JOKNN 08 FIN JOKNN 08 FIN MEUDON FR	48 48 18 N 48 48 18 N 60 48 50 N 60 48 50 N 48 48 18 N	002 13 52 002 13 52 023 30 09 023 30 09 002 13 52	162 162 103 103 162	23 13 04.60 23 13 17.00 23 13 17.10 23 13 26.30 23 13 31.60	100 51 00 102 06 00 178 12 00 177 18 00 103 27 00	19 12 00 18 14 0C 15 36 00 15 00 00 17 09 00	II,
JOKNN OB FIN -MEUDON FR JOKNN OB FIN MEUDON FR JOKNN OB FIN	60 48 50 N 48 48 18 N 60 48 50 N 48 48 18 N 60 48 50 N	023 30 09 002 13 52 023 30 09 002 13 52 023 30 09	103 162 103 162 103	23 13 41.00 23 13 43.30 23 13 52.50 23 13 58.60 23 14 04.30	176 06 00 104 27 00 175 12 00 105 43 00 174 18 00	14 00 00 16 18 00 13 18 00 15 10 00 12 30 00	
			2 AUG 195	8			
MEUOON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 50 06.00 00 50 23.40 00 50 33.50 00 50 44.00 00 50 59.20	312 03 00 310 59 00 310 20 00 309 34 00 308 27 00	10 37 00 12 37 00 13 38 00 14 46 00 16 39 00	
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 43 19 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 51 14.20 00 51 30.10 00 51 43.00 00 51 53.90 00 52 07.00	307 08 00 305 35 00 304 10 00 302 51 00 301 05 00	18 39 00 20 51 00 22 42 00 24 22 00 26 36 00	
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 52 18.10 00 52 31.50 00 52 44.70 00 53 01.10 00 53 12.30	299 25 00 297 08 00 294 40 00 290 59 00 288 04 00	28 22 00 30 45 00 33 12 00 36 22 00 38 26 00	
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 - 162 162 162 162	00 53 27.40 00 53 42.60 00 53 57.60 00 54 25.30 00 54 35.60	283 34 00 278 20 00 272 09 00 263 40 00 252 34 00	41 29 00 44 24 00 47 10 00 49 53 00 52 07 00	
MEUOON FR MEUDON FR MEUDON FR MEUDON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 54 48.80 00 55 09.90 00 55 24.80 00 55 38.90 03 55 51.90	244 26 00 232 02 00 223 30 00 216 01 00 209 51 00	52 56 00 53 08 00 52 24 00 51 12 00 49 43 00	
MEUDON FR MEUDON FR MEUDON FR MEUOON FR N CANTON A O	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 40 55 54 N	002 13 52 002 13 52 002 13 52 002 13 52 278 32 40	162 162 162 162 366	00 56 03.10 00 56 18.10 00 56 32.60 00 56 48.20 04 20 37.50	205 10 00 199 38 00 195 01 00 090 48 00 001 48 00	48 15 00 46 09 00 43 59 00 41 31 00 23 54 00	•
CLEVELND A O CLEVELNO A O MLWKEE A WIS N CANTON A O SPOKN A WASH	41 29 46 N 41 29 46 N 42 58 07 N 40 55 54 N 47 37 37 N	278 12 16 278 12 16 271 51 05 278 32 40 242 38 59	220 220 294 366 706	06 00 54.00 06 02 22.00 06 02 33.70 06 04 07.00 07 44 01.50	038 18 00 022 40 00	30 00 00 49 00 00 52 15 00 52 00 00 61 30 00	•
DENVR A COLO SACMTO E CAL KANCITY MO MLWKEE A WIS PORTLAND ORE	39 44 52 N 38 32 55 N 39 02 02 N 42 58 07 N 45 29 19 N	255 03 24 238 14 51 265 25 08 271 51 05 237 22 27	15 259 294	07 45 15 00 07 46 14 40 07 46 39 00 07 47 21 050 09 28 24 00	002 06 28 018 20 00 266 12 00	* 39 00 00 29 15 00	
SACMTO E CAL DENVR A COLO KAGOSHIMA J	38 32 55 N 39 44 52 N 31 31 34 N	238 14 51 255 03 24 130 31 47	1625	09 29 43.60 09 29 47.00 16 19 55.00	284 00 00	14 00 00	

STATION	LAT I TUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEM #	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			2 AUG 1958	(CONT)			
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30 013 20 30 013 20 30	50 50 50 50 50	21 19 36.90 21 20 03.70 21 20 21.40 21 20 30.50 21 20 47.40	335 36 00 004 12 00 015 20 00 * 013 48 00 019 54 00	23 12 00 26 00 00 56 00 00 * 28 12 00 29 06 00	
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30 013 20 30 013 20 30	50 50 50 50 50	21 21 13.20 21 21 38.40 21 22 03.40 21 22 34.10 21 22 41.30	029 54 00 039 42 00 048 36 00 058 06 00 001 22 00 *	30 00 00 30 00 00 29 06 00 27 12 00 38 30 00 #	
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30 013 20 30 013 20 30	50 50 50 50	21 23 00 • 10 21 23 17 • 10 21 23 28 • 10 21 23 48 • 30 21 24 20 • 80	065 06 00 001 10 00 * 071 24 00 075 18 00 080 30 00	25 24 00 32 30 00 * 23 06 00 21 36 00 19 00 00	•
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER FASSBURG GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 54 00 N	012 20 30 013 20 30 013 20 30 013 20 30 010 11 00	50 50 50 50	21 24 42.59 21 25 31.60 21 25 40.80 21 25 48.60 23 03 00.00	083 30 00 089 00 00 096 42 00 090 30 00 013 25 00 *	17 24 00 14 00 00 15 24 00 13 00 00 54 18 00 *	
MEUDON FR BERLN SG GER MEUDON FR BERLN SG GER MEUDON FR	48 48 18 N 52 28 30 N 48 48 18 N 52 28 30 N 48 48 18 N	002 13 52 013 20 30 002 13 52 013 20 30 002 13 52	162 50 162 50 162	23 03 54.10 23 04 01.50 23 04 10.90 23 04 24.40 23 04 30.00	345 12 00 313 42 00 348 30 00 313 12 00 352 47 00	22 12 00 22 36 00 24 52 00 27 00 00 27 47 00	
BERLN SG GER SEAFORO ENG FASSBURG GER MEUOON FR BILTHVN NETH	52 28 30 N 50 48 00 N 52 54 00 N 48 48 18 N 52 08 27 N	013 20 30 000 06 00 010 11 00 002 13 52 005 12 46	162	23 04 45.80 23 04 46.00 23 04 51.00 23 04 55.80 23 05 02.97	013 51 00 * 000 00 00 017 08 00 * 359 23 00 013 06 29 *	49 42 00 # 40 00 00 66 12 00 # 32 05 00 79 18 00 #	
BERLN SG GER BILTHVN NETH MEUDON FR BERLN SG GER BILTHVN NETH	52 28 30 N 52 08 27 N 48 48 18 N 52 28 30 N 52 08 27 N	013 20 30 005 12 46 002 13 52 013 20 30 005 12 46	50 162 50	23 05 04.10 23 05 11.61 23 05 12.70 23 05 13.80 23 05 23.71	014 28 00 # 013 54 54 # 004 43 00 310 36 00 015 27 47 #	52 36 00 * 82 18 00 * 34 53 00 39 06 00 84 42 00 *	
BILTHVN NETH MEUOON FR BERLN SG GER BILTHVN NETH BILTHVN NETH	52 08 27 N 48 48 18 N 52 28 30 N 52 08 27 N 52 08 27 N	005 12 46 002 13 52 013 20 30 005 12 46 005 12 46	162 50	23 05 28.89 23 05 30.20 23 05 35.80 23 05 37.53 23 05 47.04	018 28 05 * 011 18 00 308 30 00 020 31 54 * 021 38 48 *	85 00 00 * 37 59 00 45 30 00 82 48 00 * 79 24 00 *	
MEUDON FR BERLN SG GER BATTERSE ENG BERLN SG GER MEUDON FR	48 48 18 N 52 28 30 N 51 28 00 N 52 28 30 N 48 48 18 N	002 13 52 013 20 30 359 51 00 013 20 30 002 13 52	162 50 50 162	23 05 48.00 23 05 50.00 23 05 56.40 23 06 06.10 23 06 07.30	018 42 00 306 42 00 000 57 00 * 303 64 00 027 29 00	40 26 00 50 30 00 60 24 00 * 56 30 00 42 12 00	
CHELMSFO ENG BERLN SG GER MEUOON FR BERLN SG GER MEUOON FR	51 43 00 N 52 28 30 N 48 48 18 N 52 28 30 N 48 48 18 N	000 30 00 013 20 30 002 13 52 013 20 30 002 13 52	50 162 50 162	23 06 11.00 23 06 20.50 23 06 22.70 23 06 33.50 23 06 43.10	000 30 00 * 299 42 00 035 21 00 294 18 00 045 54 00	55 00 00 * 62 12 00 43 18 00 67 36 00 43 42 00	
BERLN SG GER MEUOON FR BERLN SG GER MEUOON FR BERLN SG GER	52 28 30 N 48 48 18 N 52 28 3C N 48 48 18 N 52 28 30 N	013 20 30 002 13 52 013 20 30 002 13 52 013 20 30	50 162 50 162 50	23 06 52.10 23 06 58.10 23 07 05.00 23 07 13.70 23 07 15.80	278 48 00 053 21 00 019 37 30 # 050 47 00 228 48 00	75 00 00 43 37 00 48 54 00 * 42 50 00 80 06 00	
MEUOON FR BERLN SG GER MEUOON FR BERLN SG GER MEUOON FR	48 48 18 N 52 28 30 N 48 48 18 N 52 28 30 N 48 48 18 N	002 13 52 013 20 30 002 13 52 013 20 30 002 13 52	162 50 162 50 162	23 07 33.80 23 07 42.00 23 07 51.30 23 07 57.40 23 08 06.80	069 17 00 177 30 00 075 49 00 166 12 00 080 49 00	41 12 00 74 12 00 39 22 00 68 42 00 37 38 00	
BERLN SG GER MEUOON FR BERLN SG GER MEUOON FR BERLN SG GER	52 28 30 N 48 48 18 N 52 28 30 N 48 48 18 N 52 28 30 N	013 20 30 002 13 52 013 20 30 002 13 52 013 20 30	50 162 50 162 50	23 08 13.70 23 08 24.80 23 08 30.00 23 08 43.30 23 08 47.80	159 42 00 086 03 00 155 54 00 090 34 00 153 24 00	62 48 00 35 25 00 57 18 00 33 10 00 52 00 00	
MEUOON FR BERLN SG GER MEUOON FR MEUDON FR BERLN SG GER	48 48 18 N 52 28 30 N 48 48 18 N 48 48 18 N 52 28 30 N	002 13 52 013 20 30 002 13 52 002 13 52 013 20 30	162 50 162 162 50	23 08 54.10 23 09 03.60 23 09 07.50 23 09 20.80 23 09 30.50	092 52 00 . 151 30 00 095 29 00 097 45 00 022 17 00 *	31 52 00 47 48 00 30 17 00 28 47 00 07 30 00 #	

STATION	LAT ITUOE	LONGI TUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			2 AUG 1958	(CONT)			
MEUOON FR BERLN SG GER BERLN SG GER MEUOON FR BERLN SG GER	48 48 18 N 52 28 30 N 52 28 30 N 48 48 18 N 52 28 30 N	002 13 52 013 20 30 013 20 30 002 13 52 013 20 30	162 50 50 162 50	23 09 35.90 23 09 45.80 23 09 52.90 23 09 54.90 23 10 01.30	100 09 00 148 36 00 149 42 00 102 42 00 148 00 00	27 07 00 38 18 00 43 12 00 25 08 00 35 24 00	
MEUOON FR BERLN SG GER MEUOON FR MEUOON FR BERLN SG GER	48.48 18 N 52 28 30 N 48 48 18 N 48 48 18 N 52 28 30 N	002 13 52 013 20 30 002 13 52 002 13 52 013 20 30	162 50 162 162 50	23 10 05 •80 23 10 16 • 30 23 10 19 • 40 23 10 31 • 00 23 10 38 • 10	104 00 00 147 30 00 105 34 00 196 45 00 146 42 00	24 00 00 33 00 00 22 43 00 21 39 00 29 48 00	
MEUOON FR	48 48 18 N	002 13 52	162	23 10 46.90	108 14 00	20 11 00	
			3 AUG 195	8			,
MEUOON FR MEUOON FR MEUOON FR MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 41 10.60 00 49 49.40 00 50 06.70 00 50 24.40 00 50 35.00	296 33 00 292 21 00 288 48 00 284 35 00 281 45 CC	15 35 00 27 36 00 30 14 00 32 54 00 34 34 00	
MEUOON FR MEUOON FR MEUOON FR MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 50 50.40 00 51 04.00 00 51 17.40 00 51 32.40 00 51 43.90	277 14 00 272 49 00 257 56 00 262 06 00 257 16 00	30 50 00 38 41 00 40 29 00 42 07 00 43 14 00	
MEUOON FR MEUOON FR MEUOON FR MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 51 58.40 00 52 21.20 00 52 23.90 00 52 37.10 00 52 49.0	250 57 00 245 04 00 239 21 00 233 22 00 227 55 00	44 11 00 44 48 00 45 00 00 44 55 00 44 30 00	
MEUOON FR MEUDON FR MLWKEE A WIS WASH BEHL OC WASH BEHL OC	48 48 18 N 48 48 18 N 42 58 07 N 38 49 13 N 38 49 13 N	002 13 52 002 13 52 271 51 05 282 59 31 282 59 31	162 . 162 294	00 53 02.20 00 53 15.90 04 13 22.30 04 17 06.72 04 18 07.20	222 40 00 227 22 00 031 21 00 002 16 59 # 001 51 00 #	43 50 00 42 48 00 13 45 00 39 30 00 # 31 36 00 #	
AMES A IOWA OUNLAP ONTAR AMES A IOWA OENVR A COLO AMES IOWA	42 01 59 N 43 51 46 N 42 01 59 N 39 44 52 N 42 01 43 N	266 22 00 280 34 40 266 22 00 255 03 24 266 20 59	305 244 305 1625	05 56 38•68 05 57 05•00 05 57 32•25 05 57 36•04 05 57 49•00	352 12 00 013 56 36 * 003 48 00 030 15 00 006 02 06 *	23 18 00 49 00 00 * 30 18 00 17 18 00 77 46 22 *	
AMES A IOWA AMES A IOWA CHI CPLN ILL AMES A IOWA MLWKEE A WIS	42 01 59 N 42 01 59 N 41 51 58 N 42 01 59 N 42 58 07 N	266 22 00 266 22 00 272 23 35 266 22 00 271 51 05	305 305 194 305 294	05 58 33.60 05 59 19.39 05 59 34.60 05 59 44.44 05 59 50.50	021 48 00 040 48 00 023 01 00 * 052 00 00 033 55 00	38 48 00 42 48 00 74 20 00 * 43 00 00 62 00 00	١
AMES IOWA AMES A IOWA CHI CPLN ILL AMES A IOWA PORTLANO ORE	42 01 43 N 42 01 59 N 41 51 58 N 42 01 59 N 45 29 19 N	266 20 59 266 22 00 272 23 35 266 22 00 237 22 27	305 194 305 46	06 00 01.00 06 00 04.32 06 00 09.50 06 00 56.16 07 40 55.00	001 02 36 * 059 16 00 023 19 01 * 078 18 00 001 16 00 *	43 18 00 61 55 01 * 41 00 00	•
SACMTO E CÂL MLWKEE A WIS KANCITY MO CHI CPLN ILL OENVR A COLO	38 32 55 N 42 58 07 N 39 02 02 N 41 51 58 N 39 44 52 N	238 14 51 271 51 05 265 25 08 272 23 35 255 03 24	15 294 259 194 1625	07 42 18 80 07 43 12 650 07 43 14 60 07 43 18 650 07 43 42 600	002 27 C3 * 281 25 00 016 28 26 * 017 03 22 * 322 45 00	19 45 00 21 34 47 +	
PORTLANO ORE SACMTO E CAL JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	45 29 19 N 38 32 55 N 60 48 50 N 60 48 50 N 60 48 50 N	237 22 27 238 14 51 023 30 09 023 30 09 023 30 09	46 15 103 103 103	09 25 17.00 09 26 31.70 21 14 52.20 21 15 07.20 21 15 23.90	017 21 00 * 017 23 12 * 297 42 00 296 48 00 295 36 00		
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 15 38.70 21 15 54.60 21 16 04.60 21 16 17.50 21 16 30.20	294 18 00 292 42 00 291 24 00 289 18 00 286 48 00	27 48 00 31 42 00 34 30 00 38 18 00 42 24 00	
BERLN SG GER JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	52 28 30 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	013 20 30 023 30 09 023 30 09 023 30 09 023 30 09	50 103 103 103 103	21 16 34.90 21 16 41.90 21 16 55.40 21 17 06.10 21 17 17.60		26 18 00 46 36 00 51 48 00 55 54 00 60 30 00	
BERLN SG GER JOKNN OB FIN	52 28 30 N	013 20 30 023 30 09	50	21 17 18.60 21 17 31.30	013 00 00	31 06 00 65 30 00	

STATION	LATITUDE	LONGITUDE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			3 AUG 1958	(CONT)			
JOKNN OB FIN JOKNN OB FIN BERLN SG GER JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 52 28 30 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 013 20 30 023 30 09 023 30 09	103 103 50 103 103	21 17 40.20 21 17 50.00 21 17 50.80 21 16 02.70 21 18 15.70	244 54 00 231 54 00 026 36 00 209 54 00 190 36 00	68 06 00 69 48 00 33 06 00 70 06 00 68 18 00	
JOKNN OB FIN JOKNN OB FIN GRONNGN NETH JOKNN OB FIN BERLN SG GER	60 48 50 N 60 48 50 N 53 12 18 N 60 48 50 N 52 28 30 N	023 30 09 023 30 09 006 34 01 023 30 09 013 20 30	103 103 103 50	21 18 31.50 21 18 43.90 21 18 46.65 21 18 57.60 21 19 10.80	174 00 00 165 30 00 020 10 18 * 158 48 00 058 00 00	63 18 0D 60 00 00 35 24 00 * 55 24 00 31 12 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 19 12.70 21 19 27.30 21 19 46.10 21 19 56.12 21 20 12.30	153 42 00 150 12 00 146 42 00 145 24 00 143 36 00	50 42 00 46 30 00 41 30 00 39 12 00 35 48 00	
JOKNN OB FIN BERLN SG GER JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 52 28 30 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 013 20 30 023 30 09 023 30 09 023 30 09	103 50 103 103 103	21 20 27.30 21 20 34.00 21 20 47.40 21 21 05.50 21 21 24.50	142 18 00 078 54 00 140 42 00 139 48 00 138 54 00	33 06 00 24 06 00 29 36 00 27 00 00 24 30 00	
BERLN SG GER JOKNN OB FIN BERLN SG GER JOKNN OB FIN JOKNN OB FIN	52 28 30 N 60 48 50 N 52 28 30 N 60 48 50 N 60 48 50 N	013 20 30 023 30 09 013 20 30 023 30 09 023 30 09	50 103 50 103	21 21 25 • 50 21 21 49 • 50 21 22 00 • 50 21 22 06 • 30 21 22 25 • 10	087 12 00 137 54 00 091 24 00 137 24 00 136 54 00	19 42 00 21 30 00 16 54 00 19 42 00 17 54 00	
BERLN SG GER JOKNN OB FIN BERLN SG GER JOKNN OB FIN JOKNN OB FIN	52 28 30 N 60 48 50 N 52 28 30 N 60 48 50 N 60 48 50 N	013 20 30 023 30 09 013 20 30 023 30 09 023 30 09	50 103 50 103 103	21 22 26.90 21 22 51.40 21 22 53.10 21 23 06.40 21 23 44.50	094 00 00 136 24 00 096 12 00 136 06 00 135 24 00	15 00 00 15 36 00 13 06 00 14 24 00 11 36 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 24 12.70 22 59 53.70 23 00 08.30 23 00 29.90 23 00 42.90	135 06 00 263 06 00 280 24 00 276 30 00 273 48 00	09 36 00 12 54 00 14 12 00 16 00 00 17 06 00	
JOKNN OB FIN MEUDON FR JOKNN OB FIN JOKNN OB FIN MEUOON FR	60 48 50 N 48 48 18 N 60 48 50 N 60 48 50 N 48 48 18 N	023 30 09 002 13 52 023 30 09 023 30 09 002 13 52	103 162 103 103 162	23 00 57.80 23 01 06.80 23 01 09.70 23 01 23.90 23 01 30.30	270 42 00 346 41 00 268 00 00 264 36 00 352 11 00	18 18 00 28 55 00 19 12 00 20 18 00 33 41 00	
JOKNN OB FIN MEUOON FR JOKNN OB FIN MEUDON FR JOKNN OB FIN	60 48 50 N 48 48 18 N 60 48 50 N 48 48 18 N 60 48 50 N	023 30 09 002 13 52 023 30 09 002 13 52 023 30 09	103 162 103 162 103	23 01 38.30 23 01 41.00 23 01 53.40 23 01 59.20 23 02 12.70	261 00 00 354 54 00 256 54 00 000 40 00 251 42 00	21 24 00 35 37 00 22 18 00 39 17 00 23 18 00	
MEUDON FR JOKNN OB FIN MEUOON FR JOKNN OB FIN MEUDON FR	48 48 18 N 60 48 50 N 48 48 18 N 60 48 50 N 48 48 18 N	002 13 52 023 30 09 002 13 52 023 30 09 002 13 52	162 103 162 103 162	23 02 14.90 23 02 27.80 23 02 32.70 23 02 42.20 23 02 56.50	006 37 00 247 30 00 014 39 00 243 24 00 027 26 00	42 26 00 23 54 00 45 42 00 24 24 00 49 07 00	
JOKNN OB FIN FASSBURG GER MEUDON FR JOKNN OB FIN MEUDON FR	60 48 50 N 52 54 00 N 48 48 18 N 60 48 50 N 48 48 18 N	023 30 09 010 11 00 002 13 52 023 30 09 002 13 52	103 162 103 162	23 02 57.40 23 03 00.00 23 03 17.10 23 03 22.90 23 03 34.60	239 12 00 019 07 00 * 040 01 00 232 00 00 051 02 00	24 36 00 51 24 00 50 47 00 24 48 00 51 01 00	• •
JOKNN OB FIN MEUDON FR JOKNN OB FIN MEUDON FR MEUDON FR	60 48-50 N 48 48 18 N 60 48 50 N 48 48 18 N 48 48 18 N	023 30 09 002 13 52 023 30 09 002 13 52 002 13 52	103 162 103 162 162	23 03 50.10 23 03 50.60 23 04 01.70 23 04 08.30 23 04 20.80	227 18 00 060 36 00 221 42 00 070 21 00 076 14 00	24 36 00 50 20 00 24 06 00 48 41 00 47 05 00	
JOKNN ÖB FIN MEUOON FR JOKNN OB FIN MEUDON FR JOKNN OB FIN	60 48 50 N 48 48 18 N 60 48 50 N 48 48 18 N 50 48 50 N		103 162 103 162 103	23 04 24.20 23 04 37.10 23 04 40.50 23 04 53.20 23 04 59.70	216 24 00 082 59 00 212 42 00 088 38 00 208 42 00	23 12 00 44 50 00 22 30 00 42 25 00 21 36 00	
MEUDON FR MEUDON FR JOKNN OB FIN MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 60 48 50 N 48 46 18 N 48 48 18 N	002 13 52 023 30 09 002 13 52	162 103 162	23 05 04.90 23 05 18.50 23 05 19.40 23 05 30.80 23 05 46.20	098 38 00	40 37 00 38 31 00 20 30 00 36 42 00 34 30 00	

STATION	LATITUOE	LONGITUDE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE I'N KM
			3 AUG 1958	(CONT)			
JOKNN OB FIN MEUDON FR JOKNN OB FIN MEUOON FR MEUDON FR	60 48 50 N 48 48 18 N 60 48 50 N 48 48 18 N 48 48 18 N	023 30 09 002 13 52 023 30 09 002 13 52 002 13 52	103 162 103 162 162	23 05 47.70 23 05 55.80 23 06 04.30 23 06 05.00 23 06 15.00	200 18 00 103 25 00 197 48 00 104 52 00 106 21 00	18 54 00 33 06 00 18 00 00 31 53 00 30 36 00	
AGEN FRANCE JOKNN OB FIN MEUOON FR MEUDON FR JOKNN OB FIN	44 10 36 N 60 48 50 N 48 48 18 N 48 48 18 N 60 48 50 N	000 35 42 023 30 09 002 13 52 002 13 52 023 30 09	103 162 162 103	23 06 25.00 23 06 27.40 23 06 28.20 23 06 41.30 23 06 46.60	070 00 00 194 42 00 108 12 00 109 43 00 192 18 00	32 18 00 16 36 00 28 52 00 27 23 00 15 30 00	
MEUDON FR	48 48 18 N	002 13 52	162	23 06 58.40	111 32 00	25 27 00	
			4 AUG 1958	3			
AGEN FRANCE LNDSTRT NETH DUNLAP ONTAR AMES A IOWA AMES A IOWA	44 10 36 N 52 37 39 N 43 51 46 N 42 01 59 N 42 01 59 N	000 35 42 004 44 58 280 34 40 266 22 00 266 22 00	244 305 305	00 50 31.00 00 52 28.41 04 11 17.00 05 52 24.67 05 53 37.24	260 12 00 019 23 40 # 002 45 48 # 343 00 00 353 00 00	52 06 00 03 06 00 # 56 54 00 # 18 54 00 29 12 00	
CHRCHL B CAN OENVR A COLO AMES A IOWA AMES A IOWA DUNLAP ONTAR	57 56 12 N 39 44 52 N 42 01 59 N 42 01 59 N 43 51 46 N	265 49 33 255 03 24 266 22 00 266 22 00 280 34 40	1625 305 305 244	05 53 53.66 05 53 59.40 05 54 21.31 05 55 06.24 05 55 13.00	180 CO GO 027 30 00 002 00 00 015 CO 00 016 02 30 *	51 00 00 20 18 00 36 48 00 44 18 00 47 30 00 *	
AMES A IOWA AMES IOWA AMES A IOWA AMES IOWA CHI CPLN ILL	42 01 59 N 42 01 43 N 42 01 59 N 42 01 43 N 41 51 58 N	266 22 00 266 20 59 266 22 00 266 20 59 272 23 35	305 305 194	05 55 40 80 05 56 06 00 05 56 24 00 05 56 41 00 05 56 44 65	032 30 00 000 23 58 * 057 30 00 000 12 51 * 021 58 10 *	48 54 00 57 54 46 * 52 18 00 45 51 29 * 57 30 00 *	
MLWKEE A WIS PORTLAND ORE DENVR A COLO SACMTO E CAL MLWKEE A WIS	42 58 07 N 45 29 19 N 39 44 52 N 38 32 55 N 42 56 07 N	271 51 05 237 22 27 255 03 24 238 14 51 271 51 05	294 46 1625 15 294	05 57 17.00 07 37 31.50 07 39 03.00 07 39 54.80 07 40 43.70	097 00 00 000 10 40 * 314 15 00 001 09 57 * 279 00 00	71 00 00 58 24 00 * 42 30 00 41 24 00 * 17 30 00	
PORTLAND ORE SACMTO E CAL WOOMER AUS WOOMER AUS WOOMER AUS	45 29 19 N 38 32 55 N 31 06 06 S 31 06 06 S 31 06 06 S	237 22 27 238 14 51 136 46 54 136 46 54 136 46 54	46 15 162 162 162	09 21 20.00 69 22 30.10 20 12 29.74 20 12 45.93 20 13 02.12	020 C8 C0 # C15 51 55 # O18 23 36 # O18 12 54 # C18 U2 24 #	24 30 00 * 35 14 00 * 57 51 00 * 57 51 00 * 57 51 00 *	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 10 33.90 21 10 49.00 21 11 05.87 21 11 23.90 21 11 44.50	297 30 00 296 24 00 295 18 00 293 36 00 291 12 00	15 30 00 17 54 00 20 30 00 23 54 00 28 24 00	
JOKNN OB FIN JOKNN OB FIN BERLN SG GER JOKNN OB FIN CHELMSFO ENG	60 48 50 N 60 48 50 N 52 28 30 N 60 48 50 N 51 43 00 N	023 30 09 023 30 09 013 20 30 023 30 09 000 30 00	103 103 50 103	21 12 01.00 21 12 16.20 21 12 20.20 21 12 32.00 21 12 35.00	288 42 00 285 54 00 350 00 00 282 00 00 003 05 00 **	32 18 00 36 24 00 26 12 00 41 00 00 53 00 00	•
JOKNN OB FIN BERLN SG GER PIC MIOI FR JOKNN OB FIN JOKNN OB FIN	60 48 50 N 52 28 30 N 42 56 12 N 60 48 50 N 60 48 50 N	023 30 09 013 20 30 000 08 32 023 30 09 023 30 09	103 50 2862 103 103	21 12 49.60 21 12 53.60 21 13 00.50 21 13 02.90 21 13 13.30	276 24 00 000 24 00 024 24 00 270 36 00 264 42 00	46 30 00 30 48 00 07 42 00 51 00 00 54 24 00	
BERLN SG GER PIC MIDI FR JOKNN OB FIN PIC MIOI FR JOKNN OB FIN	52 28 30 N 42 56 12 N 60 48 50 N 42 56 12 N 60 48 50 N	013 20 30 000 08 32 023 30 09 000 08 32 023 30 09	50 2862 103 2862 103	21 13 18.30 21 13 19.00 21 13 20.20 21 13 25.00 21 13 30.00	009 48 00 027 06 00 260 12 00 028 30 00 252 30 00	34 12 00 07 06 00 56 24 00 07 06 00 59 18 00	
JOKNN OB FIN PIC MIOI FR JOKNN OB FIN BERLN SG GER JOKNN OB FIN	60 48 50 N 42 56 12 N 60 48 50 N 52 28 30 N 60 48 50 N	023 30 09 000 08 32 023 30 09 013 20 30 023 30 09	103 2862 103 50 103	21 13 36.90 21 13 43.50 21 13 48.10 21 13 51.40 21 13 58.80	234 36 00 024 12 00	61 00 00 07 12 00 63 00 00 37 18 00 63 48 00	
PIC MIOI FR JOKNN OB FIN PIC MIOI FR 8ERLN SG GER JOKNN OB FIN	42 56 12 N 60 48 50 N 42 56 12 N 52 28 30 N 60 48 50 N	000 08 32 013 20 30	2862 103 2862 50 103	21 14 00.50 21 14 06.90 21 14 09.50 21 14 15.30 21 14 16.40	213 06 00 034 48 00 035 36 00	07 12 00 63 42 00 07 12 00 38 12 00 62 54 00	
PIC MIOI FR BERLN SG GER	42 56 12 N 52 28 30 N		2862	21 14 19 • 50 21 14 22 • 60	036 54 00	07 12 00	*

STATION	LAT ITUDE	LONGITUOE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
	9		4 AUG 1958	(CONT)			
JOKNN OB FIN PIC MIOI FR JOKNN OB FIN BERLN SG GER PIC MIOI FR	60 48 50 N 42 56 12 N 60 48 50 N 52 28 30 N 42 56 12 N	023 30 09 000 08 32 023 30 09 013 20 30 000 08 32	103 2862 103 50 2862	21 14 27.20 21 14 31.50 21 14 36.10 21 14 39.60 21 14 41.50	191 54 00 038 30 00 184 36 00 046 48 00 040 18 00	61 06 00 07 12 00 59 00 00 38 50 00 07 06 00	
BERLN SG GER JOKNN OB FIN PIC MIOI FR PIC MIOI FR JOKNN OB FIN	52 28 30 N 60 48 50 N 42 56 12 N 42 56 12 N 60 48 50 N	013 20 30 023 30 09 000 08 32 000 08 32 023 30 09	50 103 2862 2862 103	21 14 49 •10 21 14 50 •50 21 14 53 •50 21 15 03 •50 21 15 05 •70	001 07 00 * 175 12 00 041 42 00 043 30 00 167 54 00	51 00 00 <b>*</b> 55 24 00 07 00 00 06 48 00 51 24 00	
BERLN SG GER PIC MIOI FR JOKNN OB FIN PIC MIOI FR BERLN SG GER	52 28 30 N 42 56 12 N 60 48 50 N 42 56 12 N 52 26 30 N	013 20 30 000 08 32 023 30 09 000 08 32 013 20 30	50 2862 103 2862 50	21 15 06.00 21 15 14.00 21 15 18.80 21 15 31.00 21 15 32.00	057 54 00 044 48 00 163 12 00 047 00 00 067 00 00	36 18 00 06 48 00 48 00 00 06 24 00 34 00 00	
JOKNN OB FIN PIC MIOI FR JOKNN OB FIN PIC MIOI FR BERLN SG GER	60 48 50 N 42 56 12 N 60 48 50 N 42 56 12 N 52 28 30 N	023 30 09 000 08 32 023 30 09 000 08 32 013 20 30	103 2862 103 2862 50	21 15 34.20 21 15 37.00 21 15 44.10 21 15 46.90 21 15 53.40	158 48 00 048 24 00 156 36 00 049 36 00 073 30 00	44 06 00 96 18 00 41 48 00 06 12 00 31 54 00	
PIC MIOI FR JOKNN OB FIN PIC MIOI FR BERLN SG GER BERLN SG GER	42 56 12 N 60 48 50 N 42 56 12 N 52 28 30 N 52 28 30 N	000 08 32 023 30 09 000 08 32 013 20 30 013 20 30	2862 103 2862 50 50	21 15 56.50 21 16 04.40 21 16 06.50 21 16 07.30 21 16 15.20	051 06 00 152 54 00 053 06 00 000 20 00 # 078 48 00	06 00 00 37 30 00 05 48 00 31 12 00 # 29 36 00	
JOKNN OB FIN PIC MIOI FR PIC MIOI FR JOKNN OB FIN PIC MIOI FR	60 48 50 N 42 56 12 N 42 56 12 N 60 48 50 N 42 56 12 N	023 30 09 000 08 32 000 08 32 023 30 09 000 08 32	103 2862 2862 103 2862	21 16 23.00 21 16 23.50 21 16 32.50 21 16 36.20 21 16 44.00	150 36 00 054 48 00 056 00 00 148 54 00 057 12 00	34 12 00 05 24 00 05 12 00 31 42 00 05 06 00	
BERLN SG GER PIC MIOI FR JOKNN OB FIN PIC MIOI FR JOKNN OB FIN	52 28 30 N 42 56 12 N 60 46 50 N 42 56 12 N 60 48 50 N	013 20 30 000 08 32 023 30 09 000 08 32 023 30 09	50 2862 103 2862 103	21 16 53.10 21 16 53.50 21 16 55.20 21 17 02.00 21 17 13.20	086 36 00 058 18 00 147 18 00 059 06 00 145 54 00	25 36 00 04 48 00 28 48 00 04 30 00 26 18 00	
BERLN SG GER PIC MIOI FR JOKNN OB FIN PIC MIOI FR JOKNN OB FIN	52 28 30 N 42 56 12 N 60 48 50 N 42 56 12 N 60 48 50 N	013 20 30 000 08 32 023 30 09 000 08 32 023 30 09	50 2862 103 2862 103	21 17 19.00 21 17 19.50 21 17 26.00 21 17 28.00 21 17 40.20	090 36 00 060 24 00 145 06 00 061 42 00 144 24 00	23 00 00 04 18 00 24 36 00 04 00 00 23 00 00	
PIC MIOI FR BERLN SG GER PIC MIDI FR JOKNN OB FIN PIC MIOI FR	42 56 12 N 52 28 30 N 42 56 12 N 60 48 50 N 42 56 12 N	000 08 32 013 20 30 000 98 32 023 30 09 000 08 32	2862 50 2862 103 2862	21 17 44.00 21 17 44.60 21 17 52.50 21 17 56.90 21 18 00.50	063 00 00 093 48 00 063 54 00 143 30 00 064 48 00	03 36 00 20 42 00 03 24 00 21 12 00 03 12 00	
PIC MIOI FR BERLN SG GER JOKNN OB FIN PIC MIOI FR PIC MIOI FR	42 56 12 N 52 28 30 N 60 48 50 N 42 56 12 N 42 56 12 N	000 08 32 013 20 30 023 30 09 000 08 32 000 08 32	2862 50 103 2862 2862	21 18 11.50 21 18 14.20 21 18 18.90 21 18 19.50 21 18 29.00	065 36 00 097 00 00 142 36 00 066 36 00 067 30 00	02 54 00 18 00 00 19 00 00 02 42 00 02 30 00	
BERLN SG GER PIC MIOI FR JOKNN OB FIN PIC MIDI FR JOKNN OB FIN	52 28 30 N 42 56 12 N 60 48 50 N 42 56 12 N 60 48 50 N	013 20 30 000 08 32 023 30 09 000 08 32 023 30 09	50 2862 103 2862 103	21 18 36.00 21 18 38.50 21 18 39.20 21 18 56.00 21 18 59.70	099 00 00 068 30 00 141 54 00 070 00 00 141 18 00	16 18 00 02 12 00 17 06 00 01 48 00 15 18 00	
BERLN SG GER PIC MIOI FR PIC MIOI FR JOKNN OB FIN BERLN SG GER	52 28 30 N 42 56 12 N 42 56 12 N 60 48 50 N 52 28 30 N	013 20 30 000 08 32 000 08 32 023 30 09 013 20 30	50 2862 2862 103 50	21 19 02.00 21 19 06.00 21 19 13.50 21 19 22.20 21 19 25.20	101 12 00 071 00 00 071 42 00 149 42 00 102 54 00	14 30 00 01 18 00 01 06 00 13 30 00 13 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 19 45.50 22 56 10.40 22 56 24.10 22 56 35.40 22 56 52.50	278 48 00 276 12 00 273 54 00	11 54 00 13 36 00 14 36 00 15 30 00 16 42 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N	023 30 09	103 103 103 103 103	22 57 08 60 22 57 23 69 22 57 43 64 22 58 02 65 22 58 17 61	263 24 00 258 42 00 254 00 00	17 48 00 18 48 00 19 54 00 20 45 00 21 18 00	

STATION	LATITU0E	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			4 AUG 1958	(CONT)			
JOKNN 08 FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	22 58 32.70 22 58 53.40 22 59 12.20 22 59 31.40 22 59 47.50	246 12 00 240 54 00 236 06 00 231 18 00 227 24 00	21 42 00 22 06 00 22 18 00 22 12 00 21 54 00	
BERLN SG GER WALTMSTW ENG JOKNN OB FIN WALTMSTW ENG CHELMSFO ENG	52 28 30 N 51 35 00 N 60 48 50 N 51 35 00 N 51 43 00 N	013 20 30 000 00 00 023 30 09 000 00 00 000 30 00	50 103	22 59 52.20 23 00 00.00 23 00 02.40 23 00 04.50 23 00 08.00	241 18 00 023 04 00 * 224 06 00 023 05 00 * 022 56 00 *	60 16 00 31 00 00 # 21 36 00 29 47 00 # 28 00 00 #	
WALTMSTW ENG BERLN SG GER JOKNN 08 FIN BERLN SG GER JOKNN 08 FIN	51 35 0C N 52 28 30 N 60 48 50 N 52 28 30 N 60 48 50 N	000 00 00 013 20 30 023 30 09 013 20 30 023 30 09	50 103 50 103	23 00 09.00 23 00 12.60 23 00 20.40 23 00 38.00 23 00 41.30	023 06 00 * 225 12 00 220 06 00 205 48 00 215 42 00	28 12 00 * 60 24 00 21 00 00 57 42 00 20 18 00	,
BERLN SG GER JOKNN OB FIN BERLN SG GER JOKNN OB FIN JOKNN OB FIN	52 28 30 N 60 48 50 N 52 28 30 N 60 48 50 N 60 48 50 N	013 20 30 023 30 09 013 20 30 023 30 09 023 30 09	50 103 50 103 103	23 00 58 650 23 01 01 650 23 01 12 60 23 01 24 60 23 01 47 30	194 18 00 211 54 00 189 06 00 208 06 00 204 12 00	53 54 00 19 24 00 51 06 00 18 24 00 17 12 00	
BERLN SG GER BERLN SG GER BERLN SG GER JOKNN OB FIN BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 60 48 50 N 52 28 30 N	013 20 30 013 20 30 013 20 30 023 30 09 013 20 30	50 50 50 103 50	23 01, 47.80 23 02 04.80 23 02 21.40 23 02 22.80 23 02 40.40	177 36 00 173 36 00 171 06 00 199 18 00 168 18 00	44 12 00 40 54 00 38 06 00 15 18 00 35 00 00	
			5 AUG 195	58			
MEUOON FR MEUDON FR MEUDON FR MEUOON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 16 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 39 57.20 00 40 13.50 00 40 26.80 00 40 38.60 00 40 48.60	304 41 00 303 09 00 301 49 00 300 29 00 299 22 00	08 43 00 10 11 00 11 08 00 12 22 00 13 19 00	
MEUOON FR MEUOON FR MEUOON FR MEUDON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 40 59.00 00 41 23.10 00 41 36.20 00 41 48.10 00 42 04.40	298 04 00 294 53 00 293 00 00 289 08 00 288 21 00	14 18 00 16 42 00 17 57 00 19 13 00 20 50 00	
MEUDON FR MEUOON FR MEUOON FR MEUDON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	90 42 19.20 90 42 31.40 90 42 43.30 90 42 55.70 90 43 08.10	285 31 00 283 11 00 280 35 00 277 44 00 274 51 00	22 27 00 23 40 00 24 52 00 26 05 00 27 06 00	
MEUOON FR MEUDON FR MEUOON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 43 18.60 00 43 30.50 00 43 45.70 00 43 57.90 00 44 09.60	272 11 00 269 04 00 264 50 00 261 20 00 257 49 00	28 12 00 29 13 00 30 22 00 31 13 00 31 56 00	
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	00 44 21.40 00 44 33.10 00 44 45.20 00 44 57.80 00 45 10.30	254 13 00 250 36 00 247 08 00 242 54 00 238 58 00	32 29 00 32 53 00 33 09 00 33 18 00 33 22 00	,
DUNLAP ONTAR MLWKEE A WIS CAROC CAN CARDC CAN N CANTON B O	43 51 46 N 42 58 07 N 46 47 10 N 46 47 10 N 41 04 50 N	280 34 40 271 51 05 288 43 45 288 43 45 278 26 02	244 294 91 91	04 06 05:00 04 06 06:00 04 06 42:91 04 08 00:60 04 08 22:80	017 39 0 <b>0</b> 022 46 00	19 00 00 * 86 12 00 * 58 24 00	*
BRISTOL TENN CLEVELND A O OUNLAP ONTAR WICHITA KAN DENVR A COLO	36 35 03 N 41 29 46 N 43 51 46 N 37 41 44 N 39 44 52 N	277 50 31 278 12 16 280 34 40 262 45 19 255 03 24	527 220 244 413 1625	04 09 47.00 04 10 14.00 05 49 24.00 05 49 24.10 05 49 57.60	000 58 00 014 27 30 008 13 33	* 41 48 00	*
CHI CPLN ILL MLWKEE A WIS CLEVELND A O PORTLANO ORE SACMTO E CAL	41 51 58 N 42 58 07 N 41 29 46 N 45 29 19 N 38 32 55 N			05 51 39.40 05 52 21.50 05 52 30.00 07 32 01.00 07 33 59.10	346 00 00 018 45 00 018 30 30	83 00 00 * 43 00 00 * 88 18 00	* =
DENVR A COLO SACMTO E CAL SACMTO A CAL	39 44 52 N 38 32 55 N 38 3B 25 N	238 14 51	15	07 34 50 40 09 17 13 40 11 14 35 80	016 02 08	41 00 00 34 11 00 69 15 00	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SL RA IN
			5 AUG 1958	(CONT)	,		
MAUI HAWAII MAUI HAWAII KANYAMACHI J MIL RAD MASS MIL RAO MASS	20 42 36 N 20 42 36 N 34 03 46 N 42 37 03 N 42 37 03 N	203 44 23 203 44 23 135 15 10 288 30 28 288 30 28	3048 3048 40 155 155	13 07 15.74 13 07 47.71 14 24 53.00 20 53 26.01 20 54 28.22	001 02 30 * 001 37 36 * 002 24 00 * 275 36 00 301 06 00	63 09 00 # 61 51 00 # 67 00 00 # 08 00 00 12 48 00	
MIL RAO MASS MIL RAO MASS MIL RAD MASS ATHNS PLE GR ATHNS PLE GR	42 37 03 N 42 37 03 N 42 37 03 N 38 02 50 N 38 02 50 N	288 30 28 288 30 28 288 30 28 023 51 45 023 51 45	155 155 155 509 509	20 55 27.84 20 56 26.59 20 57 28.80 21 01 35.04 21 01 41.95	328 00 00 353 36 00 007 12 00 000 15 54 # 000 14 12 #	13 36 00 10 30 00 06 48 00 05 04 00 # 04 50 00 #	
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER HANOVR E GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 18 20 N	013 20 30 013 20 30 013 20 30 013 20 30 009 36 42	50 50 50 50	21 07 46.80 21 08 15.90 21 08 32.60 21 08 55.60 21 09 10.00	008 36 00 * 358 12 00 004 12 00 014 18 00 001 43 00 *	64 42 00 # 34 00 00 36 30 00 39 48 00 58 30 00 #	
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER HARROGTE ENG	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 53 59 00 N	013 20 30 013 20 30 013 20 30 013 20 30 358 26 00	50 50 50 50	21 09 11.80 21 09 23.90 21 09 41.30 21 09 49.40 21 09 52.00	022 42 00 002 03 00 * 038 06 00 001 14 00 * 009 07 00 *	41 06 00 68 12 00 * 42 48 00 60 06 00 * 24 00 00 *	
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER HANOVR B GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 22 10 N	013 20 30 013 20 30 013 20 30 013 20 30 009 45 11	50 50 50 50	21 10 17.80 21 10 42.60 21 11 07.20 21 11 22.00 21 11 35.30	056 18 00 067 12 00 075 18 00 079 48 00 000 00 42 *	41 12 00 39 00 00 36 12 00 34 18 00 25 03 00 *	
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30 013 20 30 013 20 30	50 50 50 50	21 11 37.20 21 11 48.10 21 11 56.00 21 12 12.10 21 12 26.60	083 36 00 023 46 00 # 087 54 00 090 48 00 093 12 00	32 30 00 27 48 00 * 30 00 00 28 12 00 26 48 00	
BERLN SG GER BERLN SG GER HANOVR A GER BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 52 18 20 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 009 35 42 013 20 30 013 20 30	50 50 110 50 50	21 12 41.90 21 12 58.30 21 13 00.00 21 13 15.50 21 13 28.30	095 30 00 097 30 00 023 45 00 * 099 24 00 101 00 00	25 00 00 23 30 00 12 00 00 # 21 48 00 20 30 00	
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30 013 20 30 013 20 30	50 50 50 50	21 13 44.20 21 13 56.50 21 14 06.80 21 14 17.20 21 14 31.50	102 18 00 103 24 00 023 37 00 * 105 12 00 106 12 00	19 00 00 18 00 00 04 54 00 * 16 30 00 15 24 00	
ATHNS PLE GR BERLN SG GER BERLN SG GER BERLN SG GER MEUOON FR	38 02 50 N 52 28 30 N 52 28 30 N 52 28 30 N 48 48 18 N	023 51 45 013 20 30 013 20 30 013 20 30 002 13 52	509 50 50 50	21 14 41.28 21 14 46.20 21 15 01.00 22 51 11.50 22 51 18.60	000 13 12 * 107 12 00 108 12 00 307 28 00 330 07 00	02 12 00 * 14 18 00 13 12 00 14 48 00 19 58 00	
MEUOON FR BERLN SG GER MEUOON FR BFRLN SG GER RICHMOND ENG	48 48 18 N 52 28 30 N 48 48 18 N 52 28 30 N 54 24 00 N	002 13 52 013 20 30 002 13 52 013 20 30 358 18 00	162 50 162 50	22 51 36.80 22 51 41.50 22 51 55.70 22 51 59.40 22 52 07.00	331 26 00 304 30 00 332 59 00 302 48 00 015 35 00 #	22 54 00 18 42 00 26 14 00 21 12 00 70 30 00 **	
MEUOON FR BERLN SG GER BERLN SG GER BERLN SG GER MEUOON FR	48 48 18 N 52 28 30 N 52 28 30 N 52 28 30 N 48 48 18 N	002 13 52 013 20 30 013 20 30 013 20 30 002 13 52	162 50 50 50 162	22 52 10.70 22 52 12.00 22 52 30.40 22 52 43.00 22 52 45.30	334 34 00 301 12 00 298 48 00 296 54 00 339 06 00	29 15 00 23 06 00 26 12 00 28 18 00 37 08 00	
BERLN SG GER MEUDON FR BERLN SG GER BERLN SG GER MEUOON FR	52 28 30 N 48 48 18 N 52 28 30 N 52 28 30 N 48 48 18 N	013 20 30 002 13 52 013 20 30 013 20 30 002 13 52	50 162 50 50 162	22 52 53.40 22 53 04.10 22 53 04.20 22 53 15.70 22 53 22.70	295 00 00 342 56 00 293 42 00 290 24 00 347 16 00	30 18 00 42 20 00 32 18 00 34 42 00 47 24 00	
BERLN SG GER BERLN SG GER MEUOON FR BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 48 48 18 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 002 13 52 013 20 30 013 20 30	50 50 162 50 50	22 53 31.10 22 53 42.10 22 53 47.60 22 53 53.60 22 54 04.80	286 36 00 283 18 00 356 33 00 279 24 00 275 18 00	37 42 00 40 00 00 54 50 00 42 18 00 44 42 00	
MEUOON FR BERLN SG GER MEUOON FR BERLN SG GER BERLN SG GER	48 48 18 N 52 28 30 N 48 48 18 N 52 28 30 N 52 28 30 N	002 13 52 013 20 30 002 13 52 013 20 30 013 20 30	162 50 162 50 50	22 54 06.50 22 54 23.30 22 54 33.60 22 54 35.60 22 54 47.70	006 59 00 267 12 00 030 25 00 260 48 00 250 00 00	60 26 00 48 12 00 66 20 00 50 06 00 51 42 00	

STATION	LATITUOE	LONGI TUOE	HEIGHT TIME GMT IN IN METERS HR MIN SE	OR	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			5 AUG 1958 (CONT)			
MEUOON FR BERLN SG GER BERLN SG GER MEUOON FR MEUOON FR	48 48 18 N 52 28 30 N 52 28 30 N 48 48 18 N 48 48 18 N	002 13 52 013 20 30 013 20 30 002 13 52 002 13 32	162 · 22 54 59 50 22 55 01 50 22 55 15 162 22 55 19 162 22 55 35	20 245 30 00 50 236 24 00 90 079 53 00	67 20 00 53 00 00 53 42 00 64 39 00 61 23 00	
BERLN SG GER MEUOON FR BERLN SG GER RICHMONO ENG MEUOON FR	52 28 30 N 48 48 18 N 52 28 30 N 54 24 00 N 48 48 18 N	013 20 30 002 13 52 013 20 30 358 18 00 002 13 52	50 22 55 42 162 22 55 50 50 22 55 55 22 55 57 162 22 56 03	219 54 00 10 099 03 00 160 212 24 00 00 022 25 00 **	52 48 00 27 50 00 51 24 00 08 30 00 # 53 29 00	
BERLN SG GER BERLN SG GER MEUOON FR BERLN SG GER MEUOON FR	52 28 30 N 52 28 30 N 48 48 18 N 52 28 30 N 48 48 18 N	013 20 30 013 20 30 002 13 52 013 20 30 002 13 52	50 22 56 066 50 22 56 21 162 22 56 21 50 22 56 31 162 22 56 34	207 00 00 40 200 18 00 40 110 05 00 10 196 06 00	50 12 00 48 06 00 50 00 00 46 42 00 47 04 00	
BERLN SG GER MEUOON FR BERLN SG GER RICHMONO ENG MEUOON FR	52 28 30 N 48 48 18 N 52 28 30 N 54 24 00 N 48 48 18 N	013 20 30 002 13 52 013 20 30 358 18 00 002 13 52	50 22 56 42 162 22 56 47 50 22 56 52 22 56 58 162 22 57 01 6	90 115 50 00 50 189 18 00 00 022 35 00 #	44 54 00 44 16 00 43 12 00 - 00 30 00 * 41 34 00	
BERLN SG GER AGEN FRANCE BERLN SG GER MEUOON FR BERLN SG GER	52 28 30 N 44 10 36 N 52 28 30 N 48 48 18 N 52 28 30 N	013 20 30 000 35 42 013 20 30 002 13 52 013 20 30	50 22 57 03 0 22 57 09 0 22 57 13 0 162 22 57 13 0 50 22 57 21 0 162 22 57 21 0 1	00 034 12 00 00 184 12 00 00 119 34 00	41 30 00 43 36 00 40 00 00 39 20 00 38 42 00	
MEUOON FR BERLN SG GER AGEN FRANCE AGEN FRANCE	48 48 18 N 52 28 30 N 44 10 36 N 44 10 36 N	002 13 52 013 20 30 000 35 42 000 35 42	162 22 57 27 50 22 57 32 22 57 53 22 58 16	20 121 05 00 10 180 18 00 00 080 00 00	36 49 00 37 06 00 41 36 00 39 06 00	
		•	6 AUG 1958			
MEUOON FR MEUOON FR MEUOON FR MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 00 35 44. 162 00 36 06. 162 00 36 18. 162 00 36 30. 162 00 37 19.	20	10 56 00 12 42 00 13 44 00 14 47 00 19 04 00	
MEUOON FR MEUOON FR MEUOON FR MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 00 37 38 8 162 00 37 50 8 162 00 38 07 8 162 00 38 23 8 162 00 38 36 6	20 281 58 00 40 279 34 00 70 275 57 00 50 272 26 00	20 43 00 21 49 00 23 14 00 24 29 00	N. III
MEUOON FR MEUOON FR MEUOON FR MEUOON FR WASH BEHL OC	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 38 49 13 N	002 13 52 002 13 52 002 13 52 002 13 52 282 59 31	162 00 38 50 0 162 00 39 11 0 162 00 39 29 0 162 00 39 45 0 04 03 31 0	70 265 49 00 40 260 28 00 50 255 39 00 60 251 18 00	25 25 CO 26 19 OO 27 20 OO 28 OS OO 28 45 OO	
SPOKN A WASH CLEVELNO A O OENVR A COLO CLEVELNO A O CLEVELNO A O	47 37 37 N 41 29 46 N 39 44 52 N 41 29 46 N 41 29 46 N	242 38 59 278 12 16 255 03 24 278 12 16 278 12 16	706 05 44 08 220 05 44 58 1625 05 45 30 220 05 45 33 220 05 46 01 20 05 40 05 46 01 20 05 46 01 20 05 46 01 20 05 46 01 20 05 46 01 20 05 46 01 20 05 46 01 20 05 46 01 20 05 46 01 20 05 46 01 20 05 46 01 20 05 46 01 20 05 46 01 20 05 46 01 20 05 46 01 20 05 005 40 05 005 40 05 005 40 05 005 40 05 005 0	00 001 00 00 * 00 315 00 00 60 033 30 00 00 313 00 00	59 03 00 # 37 00 00 # 21 00 00 29 00 00 26 00 00	
OAYTON B O CLEVELNO A O OAYTON B O CLEVELNO A O PORTLANO ORE	39 50 14 N 41 29 46 N 39 50 14 N 41 29 46 N 45 29 19 N	275 44 03 278 12 16 275 44 03 278 12 16 237 22 27	249 05 46 16. 220 05 46 35. 249 05 47 20. 220 05 47 35. 46 07 28 40.	70 015 35 00 00 303 00 00 50 017 30 00 *	31 00 00 58 30 00 35 00 00 54 10 00 # 39 12 00 #	
OENVR A COLO SACMTO E CAL PORTLANO ORE SACMTO E CAL KANYAMACHI J	39 44 52 N 38 32 55 N 45 29 19 N 38 32 55 N 34 03 46 N	255 03 24 238 14 51 237 22 27 238-14 51 135 15 10	1625 07 29 15. 15 07 29 16. 46 09 11 10. 15 09 12 29. 40 14 19 37.	60 302 30 00 50 000 31 02 * 00 016 25 00 * 80 016 15 32 *	28 36 00 # 31 00 00 70 44 00 # 20 30 00 # 29 34 00 #	
KASHIWABRA J JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	34 30 24 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	135 48 15 023 30 09 023 30 09 023 30 09 023 30 09	66 14 19 39. 103 21 00 43. 103 21 01 03. 103 21 01 11. 103 21 01 19.	00 002 05 00 <b>*</b> 40 295 18 00 20 291 48 00 20 290 42 00	73 00 00 * 69 00 00 * 15 48 00 20 18 00 21 36 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 21 01 29. 103 21 01 40. 103 21 01 50. 103 21 01 59. 103 21 02 06.	288 12 00 30 286 18 00 10 284 30 00 60 282 30 00	22 48 00 24 30 00 26 54 00 28 42 00 30 42 00 32 12 00	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR	ELEVATION OR	SLANT
		2.70		IN MIN SEC	RGT ASCEN #	DECLINATION*	IN KM
			6 AUG 1958	(CONT)			
JOKNN 08 FIN JOKNN 08 FIN JOKNN 08 FIN HORSBROG ENG JOKNN 08 FIN	60 48 50 N 60 48 50 N 60 48 50 N 50 53 00 N 60 48 50 N	023 30 09 023 30 09 023 30 09 000 15 00 023 30 09	. 103 103 103	21 02 13.80 21 02 25.30 21 02 33.80 21 02 39.00 21 02 41.00	279 96 00 275 54 00 273 06 00 027 00 00 270 36 00	33 48 00 36 30 00 38 30 00 23 00 00 40 12 00 .	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN LNOSTRT NETH JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 52 37 39 N 60 48 50 N	023 30 09 023 30 09 023 30 09 004 44 58 023 30 09	103 103 103	21 02 50 50 21 03 05 70 21 03 15 50 21 03 22 10 21 03 23 70	266 42 00 259 36 00 254 18 00 002 04 00 # 249 18 00	42 30 00 45 48 00 48 00 00 58 36 00 # 49 24 00	
HORSBROG ENG JOKNN OB FIN BUSSUM NETH LNOSTRT NETH JOKNN OB FIN	50 53 00 N 60 48 50 N 52 16 52 N 52 37 39 N 60 48 50 N	000 15 00 023 30 09 005 09 18 004 44 58 023 30 09	103 103	21 03 32.00 21 03 32.30 21 03 44.64 21 03 49.30 21 04 04.40	043 00 00 243 42 00 001 24 00 * 001 29 48 * 219 48 00	22 00 00 50 54 00 52 42 00 * 50 00 00 * 53 06 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 04 10 20 21 04 25 80 21 04 35 40 21 04 46 00 21 04 56 20	215 54 00 205 00 00 198 48 00 192 54 00 187 48 00	52 54 90 · 51 48 00 · 50 36 00 49 06 00 47 24 00	
HORSBROG ENG OLST NETH JOKNN OB FIN JOKNN OB FIN BUSSUM NETH	50 53 00 N 52 19 51 N 60 48 50 N 60 48 50 N 52 16 52 N	000 15 00 006 08 28 023 30 09 023 30 09 005 09 18	103 103	21 05 01.00 21 05 06.70 21 95 15.00 21 05 27.20 21 05 36.20	065 00 00 000 15 42 * 189 06 00 175 48 00 000 05 48 *	21 00 00 34 42 00 * 44 00 00 41 42 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	21 05 40 20 21 05 51 80 21 06 05 40 21 06 21 20 21 06 42 00	172 06 00 169 18 00 166 24 00 163 42 00 160 36 00	28 06 00 * 39 18 00 37 18 00 35 06 00 32 30 00 29 24 00	
JOKNN OB FIN ATHNS PLE GR JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 38 02 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 51 45 023 30 09 023 30 09 023 30 09	103 509 103 103	21 07 02.90 21 07 06.81 21 07 16.20 21 07 30.30 21 07 44.10	158 12 00 002 01 59 * 156 54 00 155 36 00 154 36 00	26 48 00 56 42 00 # 25 12 00 23 30 00 22 00 00	
ATHNS PLE GR JOKNN OB FIN JOKNN OB FIN BUSSUM NETH HARROGTE ENG	38 02 50 N 60 48 50 N 60 48 50 N 52 16 52 N 53 59 00 N	023 51 45 023 30 09 023 30 09 005 09 18 358 26 00	509 103 103	21 07 57.50 21 07 57.80 21 08 10.80 21 08 24.90 22 35 39.00	001 35 36 * 153 36 00 152 48 00 023 41 24 * 022 45 00 *	51 54 00 # 20 36 00 19 24 00 05 12 00 # 72 00 00 #	
VLAROGN NETH BUSSUM NETH LNDSTRT NETH BUSSUM NETH MEUOON FR	51 54 49 N 52 16 52 N 52 37 39 N 52 16 52 N 48 48 18 N	004 18 59 005 09 18 004 44 58 005 09 18 002 13 52	162	22 48 17.60 22 48 23.00 22 49 00.60 22 49 01.00 22 49 03.90	017 30 00 # 016 31 30 # 019 12 42 # 018 56 54 # 010 12 00	54 48 00 # 50 24 00 # 39 12 00 # 41 24 00 # 72 20 00	
MEUOON FR LNOSTRT NETH MEUOON FR MEUOON FR BUSSUM NETH	48 48 18 N 52 37 39 N 48 48 18 N 48 48 18 N 52 16 52 N	002 13 52 004 44 58 002 13 52 002 13 52 005 09 18	162 162 162	22 49 25.40 22 49 37.80 22 49 47.90 22 50 21.10 22 50 24.20	045 14 00 020 05 00 # 084 05 00 111 07 00 020 48 06 #	76 34 00 31 18 00 * 73 55 00 64 26 00 17 00 00 *	
MEUOON FR MEUOON FR SNEEK NETH MEUDON FR SEAFORO ENG	48 48 18 N 48 48 18 N 53 02 25 N 48 48 18 N 50 48 00 N	002 13 52 002 13 52 005 39 52 002 13 52 000 06 00	162 162 162	22 50 38 • 70 22 50 57 • 30 22 50 57 • 90 22 51 14 • 60 22 51 23 • 00	117 39 00 122 03 00 021 02 36 * 124 49 00 022 13 00 *	59 03 00 53 42 00 94 36 00 * 49 15 00 08 00 00 *	
MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N	002 13 52 002 13 52	162 162	22 51 31.40 22 51 48.50	126 59 00 128 37 00	45 13 00 41 35 00	
			7 AUG 1958				
AMES A IOWA MLWKEE B WIS BRYN ATHN PA SCHNTOY A NY BRISTOL TENN	42 01 59 N 42 59 25 N 40 08 00 N 42 53 32 N 36 35 03 N	265 22 00 272 01 15 284 56 00 285 58 57 277 50 31	305 85 235 527	03 55 27.26 03 55 45.80 03 56 22.00 03 57 14.75 03 58 27.00	040 00 00 002 12 00 # 000 00 00 023 30 00 # 045 00 00	17 00 00 55 30 00 * 30 00 00 77 20 00 * 26 00 00	
OUNLAP ONTAR AMES A IOWA AMES A IOWA AMES A IOWA SACMTO E CAL	43 51 46 N 42 01 59 N 42 01 59 N 42 01 59 N 38 32 55 N	280 34 40 266 22 00 266 22 00 266 22 00 238 14 51	244 305 305 305 15	04 02 44.00 05 37 52.03 05 38 36.09 05 39 21.00 05 39 24.00	001 24 00 * 331 30 00 316 30 00 335 30 00 001 45 45 *	58 00 00 # 21 12 00 28 42 00 38 54 00	
DENVR A COLO	39 44 52 N	255 03 24	1625	05 39 43.80	028 30 00	37 40 00 <b>*</b> 32 18 00	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			7 AUG 1958	(CONT)	•		`.
AMES IOWA BRISTOL TENN AMES A IOWA AMES IOWA AMES A IOWA	42 01 43 N 36 35 03 N 42 01 59 N 42 01 43 N 42 01 59 N	266 20 59 277 50 31 266 22 00 266 20 59 266 22 00	527 305 305	05 40 14.00 05 40 15.00 05 40 24.00 05 40 48.00 05 40 59.00	017 45 42 * 015 40 00 * 343 30 00 019 49 01 * 356 30 00	73 34 10 # 54 00 00 # 56 18 00 66 17 49 # 68 42 00	
OAYTON B O AME5 IOWA CHI CPLN ILL OUNLAP ONTAR OUNLAP ONTAR	39 50 14 N 42 01 43 N 41 51 58 N 43 51 46 N 43 51 46 N	275 44 03 266 20 59 272 23 35 280 34 40 280 34 40	249 194 244 244	05 41 23.00 05 41 24.00 05 41 34.30 05 46 15.00 05 46 24.00	016 40 00 # 020 55 39 # 018 18 00 # 016 19 48 # 016 29 00 #	48 30 00 # 54 51 14 # 46 25 00 # 35 24 00 # 32 12 00 #	
PORTLANO ORE SACMTO E CAL DENVR A COLO SACMTO E CAL ASAHIKAWA J	45 29 19 N 38 32 55 N 39 44 52 N 38 32 55 N 43 46 27 N	237 22 27 238 14 51 255 03 24 238 14 51 142 21 50	15 1625 15 113	07 18 04.00 07 22 59.10 07 23 27.00 09 05 27.10 14 10 46.00	011 52 30 # 022 50 10 # 299 00 00 015 21 15 # 013 51 00 #	54 12 00 # 84 30 00 # 28 00 00 30 30 00 # 54 00 00 #	
KASHIWABRA J L UZTOGAT KASHIWABRA J JOKNN OB FIN JOKNN OB FIN	34 30 24 N 34 16 20 N 34 30 24 N 60 48 50 N 60 48 50 N	135 48 15 133 45 16 135 48 15 023 30 09 023 30 09	66 5 66 103 103	14 12 53.00 14 13 34.00 14 13 42.00 20 55 16.10 20 55 27.30	005 40 00 # 002 05 00 # 000 40 00 # 287 36 00 285 42 00	82 00 00 # 74 00 00 # 78 00 00 # 22 42 00 24 36 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN HORSBROG ENG	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 50 53 00 N	023 30 09 023 30 09 023 30 09 023 30 09 000 15 00	103 103 103 103	20 55 41.70 20 55 54.80 20 56 07.70 20 56 24.70 20 56 35.00	283 00 00 280 12 00 277 00 00 271 54 00 027 00 00	27 18 00 29 42 00 32 18 00 35 48 00 25 00 00	
BUSSUM NETH JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN CAMBR U ENG	52 16 52 N 60 48 50 N 60 48 50 N 60 48 50 N 52 12 51 N	005 09 18 023 30 09 023 30 09 023 30 09 000 05 41	103 103 103 28	20 56 35.20 20 56 37.90 20 56 56.10 20 57 10.10 20 57 12.40	003 45 00 # 267 12 00 259 24 00 252 30 00 043 48 00	68 00 00 * 38 30 00 42 06 00 44 36 00 28 06 00	
JOKNN OB FIN BUS5UM NETH JOKNN OB FIN JOKNN OB FIN CAMBR U ENG	60 48 50 N 52 16 52 N 60 48 50 N 60 48 50 N 52 12 51 N	023 30 09 005 09 18 023 30 09 023 30 09 000 05 41	103 103 103 28	20 57 23 • 80 20 57 27 • 80 20 57 40 • 90 20 57 55 • 40 20 58 06 • 40	245 CO 00 CO1 25 12 * 234 18 CO 224 54 CO 059 36 CO	46 36 00 58 00 00 * 48 18 00 48 48 00 25 30 00	
HORSBROG ENG JOKAN OB FIN JOKAN OB FIN JOKAN OB FIN CAMBR U ENG	50 53 00 N 60 48 50 N 60 48 50 N 60 48 50 N 52 12 51 N	000 15 00 023 30 09 023 30 09 023 30 09 000 05 41	103 103 103 28	20 58 12.00 20 58 24.60 20 58 39.10 20 58 52.10 20 58 59.60	055 00 00 207 18 00 199 24 00 193 24 00 071 36 00	24 00 00 47 36 00 46 06 00 44 18 00 21 42 00	
JOKNN OB FIN JOKNN OB FIN HORSBRDG ENG JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 50 53 00 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 000 15 00 023 30 09 023 30 09	103 103 103 103	20 59 04.50 20 59 20.20 20 59 23.00 20 59 31.90 20 59 47.29	188 24 00 182 48 00 070 00 00 179 18 00 175 18 00	42 30 00 40 06 00 19 00 00 38 18 00 35 54 00	
PIC MIDI FR CAMBR U ENG JOKNN OB FIN PIC MIDI FR PIC MIDI FR	42 56 12 N 52 12 51 N 60 48 50 N 42 56 12 N 42 56 12 N	000 08 32 000 05 41 023 30 09 000 08 32 000 08 32	2862 28 103 2862 2862	21 00 00.00 21 00 00.00 21 00 01.80 21 00 09.00 21 00 18.00	053 48 00 081 06 00 172 06 00 055 18 00 056 42 00	10 54 00 17 12 00 33 42 00 10 36 00 10 24 00	
JOKNN 08 FIN BUSSUM NETH PIC MIOI FR JOKNN 08 FIN PIC MIOI FR	60 46 50 N 52 16 92 N 42 56 12 N 60 48 50 N 42 56 12 N	023 30 09 005 09 18 000 08 32 023 30 09 000 08 32	103 2862 103 2862	21 00 20.90 21 00 25.60 21 00 27.00 21 00 36.90 21 00 42.50	168 36 00 023 37 30 4 058 00 00 166 12 00 060 12 00	31 00 00 18 06 00 10 18 00 28 48 00 09 54 00	•
PIC MIDI FR JOKNN OB FIN PIC MIDI FR PIC MIDI FR JOKNN OB FIN	42 56 12 N 60 48 50 N 42 56 12 N 42 56 12 N 60 48 50 N	000 08 32 023 30 09 000 08 32 000 08 32 023 30 09	2862 103 2862 2862 103	21 00 51.50 21 00 52.70 21 01 01.00 21 01 09.50 21 01 12.60	061 48 00 164 06 00 062 54 00 064 00 00 161 48 00	09 30 00 26 54 00 09 24 00 09 18 00 24 36 00	
PIC MIOI FR CAMBR U ENG PIC MIOI FR ARBEVILLE FR JOKNN OB FIN	42 56 12 N 52 12 51 N 42 56 12 N 50 07 30 N 60 48 50 N	000 08 32 000 05 41 000 08 32 001 49 42 023 30 09	2862 28 2862 103	21 01 20.00 21 01 20.70 21 01 29.50 21 01 30.00 21 01 30.10	065 18 00 089 36 00 066 30 00 089 00 00 160 06 00	08 54 00 11 54 00 08 24 00 14 30 00 22 42 00	
PIC MIOI FR PIC MIOI FR JOKNN OB FIN BUSSUM NETH JOKNN OB FIN	52 16 52 N	000 08 32 000 08 32 023 30 09 005 09 18 023 30 09	2862 2862 103	21 01 38.36 21 01 47.00 21 01 47.20 21 02 03.20 21 02 08.90	068 30 00 158 42 00 023 26 06	08 18 00 07 54 00 21 00 00 06 06 00 18 54 00	*

STATION	LATITUDE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION#	
			7 AUG 1958	(CONT)			
PIC MIDI FR PIC MIDI FR JOKNN 08 FIN PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 6D 48 5D N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 023 30 09 000 08 32 000 08 32	2862 2862 103 2862 2862	21 02 23.50 21 02 33.00 21 02 37.10 21 02 47.00 21 02 58.00	073 00 00 073 42 00 155 24 00 075 18 00 076 24 00	06 24 0D D6 24 DD 16 30 OD 05 54 OD	
PIC MIDI FR JOKNN OB FIN CAMBR U ENG RICHMOND ENG BUSSUM NETH	42 56 12 N 60 48 50 N 52 12 51 N 54 24 00 N 52 16 52 N	000 D8 32 023 30 09 000 05 41 358 18 00 005 09 18	2862 103 28	21 03 05.00 21 03 06.30 22 39 03.20 22 39 52.00 22 39 54.90	077 06 00 153 48 00 316 30 00 013 31 00 * 013 07 42 *	05 24 00 14 18 00 22 06 00 53 00 00 # 41 42 00 #	
CAMBR U ENG HDRSBROG ENG BERLN SG GER CAMBR U ENG BUSSUM NETH	52 12 51 N 50 53 0D N 52 28 30 N 52 12 51 N 52 16 52 N	00D 05 41 00D 15 00 D13 20 30 0D0 D5 41 005 D9 18	28 50 28	22 40 D2.7D 22 4D 11.00 22 4D 42.D0 22 4D 47.10 22 40 49.6D	315 30 DD 321 0D 0D 294 42 DD 314 18 0D 014 18 DO *	34 36 DD 32 30 DO 21 D6 OO 47 54 DO	
BERLN SG GER BERLN SG GER BATTERSE ENG CAMBR U ENG BERLN SG GER	52 28 30 N 52 28 30 N 51 28 00 N 52 12 51 N 52 28 30 N	013 20 30 013 2D 30 359 51 D0 000 D5 41 013 2D 30	50 50 28 50	22 41 00.00 22 41 38.20 22 41 39.20 22 41 41.60 22 41 46.00	291 48 DO 266 24 DD 017 11 DD * 307 48 DO 281 54 OD	46 18 00 *  22 48 DD  37 42 DO  65 48 OD *  70 OD OO  30 42 DO	
PIC MIDI FR SLARICM NETH PIC MIDI FR BERLN SG GER PIC MIDI FR	42 56 12 N 52 16 15 N 42 56 12 N 52 28 30 N 42 56 12 N	000 08 32 005 14 53 000 08 32 013 20 30 000 08 32	2862 2862 50 2862	22 41 48.50 22 41 51.07 22 42 00.00 22 42 06.40 22 42 09.50	350 54 DD D16 18 24 * 352 48 00 276 42 DO 354 42 GD	27 54 00 46 24 0D * 29 24 DD 33 30 DO 31 30 00	
BERLN SG GER BUSSUM NETH PIC MIDI FR BILTHVN NETH HORSBRDG ENG	52 28 30 N 52 16 52 N 42 56 12 N 52 08 27 N 50 53 00 N	D13 20 30 005 09 18 0DD D8 32 D05 12 46 000 15 00	50 2862	22 42 22.50 22 42 22.70 22 42 25.50 22 42 32.54 22 42 35.00	271 42 DO 017 20 CO * 358 12 OO 017 49 04 * 305 DD DD	35 42 00 39 00 00 * 34 30 00 41 24 00 * 87 00 00	
PIC MIOI FR CHELMSFD ENG PIC MIOI FR BILTHVN NETH BLARICM NETH	42 56 12 N 51 43 00 N 42 56 12 N 52 08 27 N 52 16 15 N	000 08 32 000 30 00 000 08 32 005 12 46 005 14 53	2862 2662	22 42 36 50 22 42 44 00 22 42 48 50 22 42 48 96 22 42 49 82	D01 0D 00 019 55 00 * 004 00 0D 018 21 DD * 018 22 48 *	36 36 DD 45 00 DD # 39 06 00 37 36 DO # 36 42 00 #	
BERLN SG GER FARNBORO ENG LNDSTRT NETH CAMBR U ENG PIC MIDI FR	52 28 30 N 51 18 00 N 52 37 39 N 52 12 51 N 42 56 12 N	013 20 30 359 12 00 004 44 58 000 05 41 000 08 32	28	22 42 52.80 22 42 54.00 22 42 57.60 22 42 57.70 22 43 01.00	260 48 0D D20 40 00 # 018 48 42 # 154 00 00 007 18 00	39 24 D0 45 00 DD # 33 12 D0 # 73 00 D0 41 24 00	
BILTHVN NETH PIC MIDI FR BERLN SG GER PIC MIDI FR PIC MIDI FR	52 08 27 K 42 56 12 N 52 28 30 N 42 56 12 N 42 56 12 N	005 12 46 000 03 32 013 20 30 000 08 37 000 08 2	2862 50 2862	22 43 07.96 22 43 08.00 22 43 16.20 22 43 16.50 22 43 26.50	D18 52 36 * 010 00 00 00 013 24 00 017 3D 00	33 00 00 # 42 36 00 41 30 00 44 24 00 45 54 00	
BERLN SG GER PIC MIDI FR CAMBR U ENG HORSBRDG ENG PIC MIDI FR	52 28 30 N 42 56 12 N 52 12 51 N 50 53 00 N 42 56 12 N	013 2D 30 000 08 32 0DD 05 41 000 15 00 000 08 32	2862	22 43 30.80 22 43 33.50 22 43 37.10 22 43 41.00 22 43 42.50	244 54 00 02D 24 DD 147 06 00 145 DD DO 024 24 DD	42 12 0D 47 24 DO 58 3D 00 65 00 00 48 36 00	
BERLN SG GER PIC MIDI FR BUSSUM NETH BERLN SG GER PIC MIDI FR	52 28 30 N 42 56 12 N 52 16 52 N 52 28 30 N 42 56 12 N	013 20 30 000 08 32 005 09 18 013 20 30 000 08 32	50	22 43 47.30 22 43 52.00 22 43 55.70 22 44 00.40 22 44 00.50	237 36 00 029 12 00 019 56 36 * 231 54 DD	42 30 00 49 54 00 19 18 00 # 42 24 00 50 54 00	
PIC MIDI FR BERLN SG GER PIC MIDI FR CAMBR U ENG BERLN SG GER	42 56 12 N 52 28 30 N 42 56 12 N 52 12 51 N 52 28 30 N	000 08 32 013 20 30 000 08 32 000 05 41 013 20 30	50 2862 28	22 44 08.DD 22 44 16.40 22 44 20.50 22 44 29.6D 22 44 30.20	037 48 00 225 06 00 044 54 00 144 06 00 219 42 00	51 54 DD 42 OD OD 53 12 OO 43 54 OO 41 12 OO	
PIC MIDI FR UTRCT 8 NETH PIC MIDI FR BERLN SG GER PIC MIDI FR	42 56 12 N 52 05 31 N 42 56 12 N 52 28 30 N 42 56 12 N	000 08 32 005 05 20 000 08 32 013 20 30 000 08 32	2862 2862 50	22 44 30.50 22 44 34.70 22 44 39.50 22 44 42.60 22 44 47.50	051 0D 0D 02D 36 18 # 056 18 00 215 12 00 060 24 00	53 36 00 14 24 00 # 53 30 00 40 24 00 53 00 00	
BERLN SG GER PIC MIDI FR PIC MIDI FR BERLN SG GER PIC MIDI FR	52 28 30 N 42 56 12 N 42 56 12 N 52 28 30 N 42 56 12 N	013 20 30 000 08 32 000 08 32 013 20 30 000 08 32	2862 2862 50	2 44 56.60 2 44 58.00 2 45 06.00 2 45 13.10 2 45 16.50	210 30 00 066 54 00 071 12 00 205 24 00 076 30 00	39 D6 O0 51 54 D0 51 24 O0 37 30 O0 50 30 O0	

SLANT RANGE IN KM

STATION	LATITUDE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			7 AUG 1958	(CONT)			
CAMBR U ENG PIC MIDI FR PIC MIDI FR BERLN SG GER PIC MIDI FR	52 12 51 N 42 56 12 N 42 56 12 N 52 28 30 N 42 56 12 N	000 05 41 000 08 32 000 08 32 013 20 30 000 08 32	28 2862 2862 50 2862	22 45 20.40 22 45 24.50 22 45 31.50 22 45 33.00 22 45 40.50	143 00 00 080 30 00 082 48 00 200 12 00 086 42 00	34 00 00 . 49 30 00 48 42 00 35 30 00 47 36 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 45 49.00	090 24 00	46 24 00	
			8 AUG 1958				
AMES A IOWA AMES A IOWA CARDC CAN AMES A IOWA AMES A IOWA	42 01 59 N 42 01 59 N 46 47 10 N 42 01 59 N 42 01 59 N	266 22 00 266 22 00 288 43 45 266 22 00 266 22 00	305 305 91 305 305	03 46 22.00 03 47 57.00 03 48 33.00 03 48 34.80 03 49 18.00	001 00 00 021 30 00 013 04 00 *. 030 00 00 039 30 00	11 42 00 16 42 00 55 36 00 * 19 00 00 18 06 00	
MLWKEE A WIS AMES IOWA AMES A IOWA OUNLAP ONTAR AMES A IOWA	42 58 07 N 42 01 43 N 42 01 59 N 43 51 46 N 42 01 59 N	271 51 05 266 20 59 266 22 00 280 34 40 266 22 00	294 305 244 305	03 49 51.80 03 50 01.00 03 50 24.00 03 50 43.00 03 51 30.00	040 12 00 001 34 08 * 059 30 00 000 35 00 * 067 00 00	27 15 00 43 01 09 # 18 42 00 72 18 00 # 15 54 00	
DUNLAP ONTAR AMES A IOWA BRISTOL TENN CARDO CAN AMES A IOWA	43 51 46 N 42 01 59 N 36 35 03 N 46 47 10 N 42 01 59 N	280 34 40 266 22 00 277 50 31 288 43 45 266 22 00	244 305 527 91 305	03 52 05.00 03 52 15.00 03 52 22.00 04 48 33.00 05 30 51.00	023 29 00 * 074 00 00 045 00 00 013 04 00 * 326 30 00	30 06 00 * 15 42 00 27 00 00 55 36 00 * 15 36 00	
PORTLANO ORE AMES A IOWA DENVR A COLO AMES A IOWA AMES A IOWA	45 29 19 N 42 01 59 N 39 44 52 N 42 01 59 N 42 01 59 N	237 22 27 266 22 00 255 03 24 266 22 00 266 22 00	46 305 1625 305 305	15 30 53.00 5 31 41.00 05 32 25.20 05 32 37.00 05 33 21.00	001 00 00 # 326 30 00 009 00 00 327 30 00 328 30 00	36 54 00 ** 23 42 00 29 00 00 33 00 00 44 06 00	
AMES IOWA AMES A IOWA WICHITA KAN AMES IOWA AMES A IOWA	42 01 43 N 42 01 59 N 37 41 44 N 42 01 43 N 42 01 59 N	266 20 59 266 22 00 262 45 19 266 20 59 266 22 00	305 413 305	05 33 47. 7 05 33 56.00 05 33 57.10 05 34 13.00 05 34 32.00	016 46 41 # 328 30 00 020 09 50 # 018 07 23 # 329 30 00	66 52 45 # 55 18 00 89 21 00 # 64 05 04 # 68 18 00	
CHI CPLN ILL OAYTON A O AMES IOWA MLWKEE A WIS DAYTON B O	41 51 58 N 39 50 40 N 42 01 43 N 42 58 07 N 39 50 14 N	272 23 35 275 44 32 266 20 59 271 51 05 275 44 03	194 251 294 249	05 34 33.30 05 34 50.00 05 34 57.00 05 34 57.20 05 35 07.00	016 49 08 # 016 13 00 # 019 47 07 # 278 48 00 016 33 00 #	46 27 42 # 44 00 00 # 52 35 37 # 56 15 00 42 45 00 #	
PORTLANO ORE DENVR A COLO PORTLANO ORE KANAGAWA J KANAGAWA J	45 29 19 N 39 44 52 N 45 29 19 N 35 26 34 N 35 26 34 N	237 22 27 255 03 24 237 22 27 139 21 16 139 21 16	46 1625 46 51 51	07 14 18.50 07 17 34.20 08 58 54.00 14 06 30.00 14 06 30.00	014 03 00 * 290 00 00 016 08 00 * 010 45 00 *	64 42 00 # 29 30 00 17 24 00 # 82 00 00 # 88 00 00 #	•
ANPAMACHI J AGEN FRANCE JOKNN OB FIN BOKNNOL TIN ON NAOL	34 03 46 N 44 10 36 N 60 48 50 N 60 48 50 N 60 48 50 N	135 15 10 000 35 42 023 30 09 023 30 09 023 30 09	40 103 103 103	14 06 33.00 20 47 36.00 20 48 13.70 20 48 24.30 20 48 35.30	001 00 00 # 013 00 00 288 18 00 286 36 00 284 36 00	89 00 00 4 13 00 00 20 00 00 21 36 00 23 24 00	•
JOKNN OB FIN JOKNN OB FIN COPNGN A DEN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 55 44 41 N 60 38 50 N 60 48 50 N	023 30 09 023 30 09 012 33 09 023 30 09 023 30 09	103 103 103 103	20 48 47.70 20 48 59.70 20 49 10.00 20 49 11.40 20 49 26.80	282 18 00 279 48 00 011 30 00 * 276 54 00 272 42 00	25 30 00 27 30 00 62 00 00 29 36 00 32 24 00	•
JOKNU OB EIN JOKNU OB EIN JOKNU OB EIN JOKNU OB EIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	20 49 39•20 20 49 49•90 20 49 59•50 20 50 08•20 20 50 14•80	268 42 00 265 54 00 261 24 00 257 36 00 254 24 00	34 36 00 36 36 00 38 12 00 39 36 00 40 42 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	20 50 26.70 20 50 43.50 20 50 55.70 20 51 11.70 20 51 24.20	233 12 00 2 <b>24</b> 18 00	42 18 00 44 06 00 44 54 00 45 18 00 44 54 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09		20 51 36.70 20 51 46.20 20 52 05.20 20 52 15.80 20 52 32.20	206 06 00 197 42 00 193 36 00	44 18 00 43 36 00 41 36 00 40 18 00 38 12 00	
JOKNN OB FIN JOKNN OB FIN				20 52 44.10 20 53 09.90		36 30 00 <b>32 54 00</b>	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR OECLINATION*	SL RA IN
			8 AUG 195	8 (CONT)		•	
JOKNN OB FIN	60 48 50 N	023 30 09	103	20 53 27.60	174 30 00	30 42 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	20 53 45.80	171 18 00	28 24 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	20 54 02.60	169 00 00	26 24 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	20 54 20.50	166 42 00	24 30 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	20 54 38.30	164 42 00	22 36 00	
JOKNN OF FIN	60 48 50 N	023 30 09	103	20 54 50.50	163 36 00	21 24 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 33 22.00	337 42 00	14 54 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 33 32.00	337 18 00	16 24 00	
PIC MIDI FR	42 56 12 N	000 06 32	2862	22 33 48.00	339 18 00	18 12 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 33 56.00	340 06 00	19 30 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 34 05.00	341 00 00	20 54 00	
BERLN SG GER	52 28 30 N	013 20 30	50	22 34 05.70	289 24 00	22 42 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 34 13.50	341 30 00	21 54 00	
BERLN SG GER	52 28 30 N	013 20 30	50	22 34 20.60	286 36 00	24 42 00	
PIC MIOI FR	42 56 12 N	000 06 32	2862	22 34 23.50	342 24 00	23 24 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 34 33.00	343 24 00	24 54 00	
8ERLN SG GER	52 28 30 N	013 20 30	50	22 34 34.90	283 54 00	26 30 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 34 41.50	344 30 00	26 12 00	
BERLN SG GER	52 28 30 N	013 20 30	50	22 34 44.90	281 24 00	27 48 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 34 53.00	345 54 00	28 24 00	
BERLN SG GER	52 28 30 N	013 20 30	50	22 34 55.50	279 06 00	29 00 00	
PIC MIDI FR	42 56 12 N	000 03 32	2862	22 35 04.00	347 18 00	30 30 00	
BERLN SG GER	52 28 30 N	013 20 30	50	22 35 05.70	276 18 00	30 18 00	
BERLN SG GER	52 26 30 N	013 20 30	50	22 35 14.80	273 48 00	31 18 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 35 17.50	349 30 00	33 00 00	
8ERLN SG GER	52 28 30 N	013 20 30	50	22 35 27.00	270 18 00	32 48 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 35 34.50	352 42 00	36 24 00	
BERLN SG GER	52 28 30 N	013 20 30	50	22 35 35.90	267 24 00	33 48 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 35 43.50	354 30 00	38 24 00	
8ERLN SG GER	52 28 30 N	013 20 30	50	22 35 49.20	263 18 00	35 12 00	
PIC MIOI FR 8ERLN SG GER COPNGN A OEN PIC MIOI FR PIC MIOI FR	42 56 12 N 52 28 30 N 55 44 41 N 42 56 12 N 42 56 12 N	000 0e 32 013 20 30 012 33 09 000 05 32 000 05 32	2862 50 2862 2862	22 35 53.00 22 35 59.60 22 36 01.04 22 36 03.00 22 36 11.50	356 24 00 259 18 00 017 27 00 * 359 00 00 001 48 00	40 36 00 36 06 00 02 06 00 * 42 54 00 44 54 00	
BERLN SG GER PIC MIDI FR BERLN SG GER AGEN FRANCE PIC MIOI FR	52 28 30 N 42 56 12 N 52 28 30 N 44 10 36 N 42 56 12 N	013 20 30 000 08 32 013 20 30 000 35 42 000 08 32	50 2862 50 2862	22 36 13 • 80 22 36 18 • 50 22 36 22 • 80 22 36 23 • 00 22 36 27 • 00	254 30 00 003 48 00 251 18 00 002 00 00 007 12 00	37 12 00 46 18 00 37 42 00 53 12 00 48 24 00	
BERLN SG GER	52 28 30 N	013 20 30	50	22 36 30 • 60	248 18 00	38 06 00	
PIC MIDI FR	42 56 12 N	000 03 32	2862	22 36 35 • 50	010 12 00	50 06 00	
BERLN SG GER	52 28 30 H	013 20 30	50	22 36 45 • 80	2-2 24 00	38 30 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 36 46 • 50	015 24 00	52 54 00	
BERLN SG GER	52 28 30 N	013 20 30	50	22 36 54 • 30	239 00 00	38 42 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 36 55.50	019 48 00	54 36 00	
8ERLN SG GER	52 28 30 N	013 20 30	50	22 37 07.40	234 12 00	38 42 00	
BERLN SG GER	52 28 30 N	013 20 30	50	22 37 15.60	231 06 00	38 30 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 37 20.50	035 18 00	58 18 00	
8ERLN SG GER	52 28 30 N	013 20 30	50	22 37 24.20	228 00 00	38 12 00	
PIC MIDI FR	42 56 12 N	000 03 32	2862	22 37 31.00	043 00 00	59 24 00	
BERLN SG GER	52 28 30 N	013 20 30	50	22 37 34.10	224 15 00	37 54 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 37 42.50	051 30 00	59 54 00	
8ERLN SG GER	52 28 30 N	013 20 30	50	22 37 45.10	220 30 00	37 18 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 37 49.50	056 54 00	59 54 00	
8ERLN SG GER	52 28 30 N	013 20 30	50	22 37 53.20	219 06 00	36 54 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 37 59.00	063 54 00	59 24 00	
8ERLN SG GER	52 28 30 N	013 20 30	50	22 38 03.10	214 48 00	36 06 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 38 08.50	070 24 00	58 54 00	
8ERLN SG GER	52 28 30 N	013 20 30	50	22 38 11.90	212 18 00	35 24 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 38 20.50	078 18 00	57 36 00	
8ERLN SG GER	52 28 30 N	013 20 30	50	22 38 26.20	000 00 00	34 12 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 38 28.50	083 06 00	56 24 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 38 35.50	086 54 00	55 18 00	
BERLN SG GER	52 28 30 N	013 20 30	50	22 38 36.70	205 30 00	33 12 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 38 41.00	089 54 00	54 24 00	
8ERLN SG GER	52 28 30 N	013 20 30	50	22 38 49.40	202 42 00	32 12 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 38 50.00	093 48 00	53 00 00	

STATION	LATITUOE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	CLANT KANGE IP KM
			9 AUG 1958				
CLEVELNO A O AMES A IOWA AMES A IOWA AMES A IOWA AMES A IOWA	41 29 46 N 42 01 59 N 42 01 59 N 42 01 59 N 42 01 59 N	278 12 16 266 22 00 266 22 00 266 22 00 266 22 00	220 305 305 305 305	01 59 48.00 03 39 26.00 03 40 03.00 03 40 39.00 03 41 40.00	036 54 00 030 00 00 008 30 00 015 30 00 024 30 00	07 00 00 13 12 00 14 48 00 17 06 00 19 48 00	
CLEVELND A O AMES IOWA AMES A IOWA AMES A IOWA MLWKEE A WIS	41 29 46 N 42 01 43 N 42 01 59 N 42 01 59 N 42 58 07 N	278 12 16 266 20 59 266 22 00 266 22 00 271 51 05	220 305 305 294	03 41 41.00 03 42 05.00 03 42 17.00 03 43 08.00 03 43 08.00	358 00 00 002 12 34 * 037 30 00 051 00 00 044 30 00	26 00 00 53 55 18 * 21 18 00 21 30 00 31 15 00	
CLEVELND A O AMES A IOWA CHI FAXN :LL MANHTN B KAN AMES A IOWA	41 29 46 N 42 01 59 N 41 59 00 N 39 13 51 N 42 01 59 N	278 12 16 266 22 00 272 21 00 263 22 54 266 22 00	220 305 218 409 305	03 43 35.00 03 43 45.10 03 43 52.60 03 43 57.70 03 44 28.00	030 00 00 058 00 00 000 52 30 # 055 37 00 067 00 00	40 00 00 21 00 00 46 26 36 * 14 19 00 20 18 00	
CLEVELND A O AMES A IOWA CLEVELND A O ARLINGTON VA CLEVELND A O	41 29 46 N 42 01 59 N 41 29 46 N 38 50 48 N 41 29 46 N	278 12 16 266 22 CO 278 12 16 282 53 35 278 12 16	220 305 220 59 220	03 44 37.00 03 45 05.00 03 45 21.00 03 45 21.00 03 45 47.00	059 48 00 074 00 00 075 00 00 023 49 00 #	41 54 00 18 30 00 41 00 00 58 12 00 * 30 00 00	
AMES A IOWA PORTLAND ORE MANHTN B KAN DAVIS CAL AMES A IOWA	42 01 59 N 45 29 19 N 39 13 51 N 38 19 48 N 42 01 59 N	266 22 00 237 22 27 263 22 54 238 31 12 266 22 00	305 46 409 305	04 24 24.00 05 23 16.60 05 24 18.00 05 24 42.40 05 25 02.00	325 00 00 001 41 00 * 335 14 00 002 18 01 * 324 30 00	20 18 00 50 24 00 * 17 19 00 49 52 00 * 27 36 00	
AMES A IOWA AMES A IOWA CLEVELND A O DENVR A COLO AMES A IOWA	42 01 59 N 42 01 59 N 41 29 46 N 39 44 52 N 42 01 59 N	266 22 00 266 22 00 278 12 16 255 03 24 266 22 00	305 305 220 1625 305	05 25 28.00 05 25 47.00 05 25 55.00 05 26 00.00 05 26 12.00	323 30 00 323 30 00 302 00 00 015 15 00 321 30 00	31 42 00 35 18 00 20 00 00 36 18 00 41 30 00	
AMES IOWA CLEVELND A O AMES A IOWA DAYTON B O MANHTN B KAN	42 01 43 N 41 29 46 N 42 01 59 N 39 50 14 N 39 13 51 N	266 21 59 278 12 16 266 22 00 275 44 03 263 22 54	220 305 249 409	05 26 20.00 05 26 38.00 05 26 39.00 05 26 39.00 05 26 43.00	015 34 50 * 297 24 00 320 00 00 014 54 00 * 344 48 00	61 15 59 <b>*</b> 24 42 00 48 48 00 41 50 00 <b>*</b> 43 06 00	
OAYTON B O DAYTON B O CHI FAXN ILL MANHTN B KAN AMES A IOWA	39 50 14 N 39 50 14 N 41 59 00 N 39 13 51 N 42 01 59 N	275 44 03 275 44 03 272 21 00 263 22 54 266 22 00	249 249 218 409 305	05 26 46.50 05 26 58.00 05 27 09.10 05 27 04.70 05 27 13.00	304 08 00 015 11 00 * 015 54 57 * 348 49 00 314 30 00	25 26 00 41 20 00 # 43 42 48 # 49 21 00 06 01 20	
DAYTON B O MANHTN B KAN OANVILLE ILL WICHITA KAN AMES IOWA	39 50 14 N 39 13 51 N 40 08 57 N 37 41 44 N 42 01 43 N	275 44 03 263 22 54 272 22 26 262 45 19 266 20 59	249 409 189 413	05 27 18.00 05 27 21.00 05 27 24.00 05 27 28.22 05 27 30.00	015 30 00 # 353 18 00 302 00 00 020 12 00 # 018 17 13 #	40 50 00 * 53 57 00 40 00 00 80 48 00 * 53 38 48 *	,
MANHTN B KAN MANHTN B KAN AMES A IOWA MANHTN B KAN CHI FAXN ILL	39 13 51 N 39 13 51 N 42 01 59 N 39 13 51 N 41 59 00 N	263 22 54 263 22 54 266 22 00 263 22 54 272 21 00	409 409 305 409 218	05 27 30.00 05 27 38.00 05 27 41.00 05 27 48.00 05 27 52.00	356 05 00 358 23 00 306 30 00 002 55 00 017 13 00 #	56 57 00 59 00 00 69 18 00 61 58 00 36 30 00	•
MANHTN B KAN PITTSBGH PA MANHTN B KAN CLEVELND A O DAYTON B O	39 13 51 N 40 29 00 N 39 13 51 N 41 29 46 N 39 5D 14 N	263 22 54 280 00 00 263 22 54 278 12 16 275 44 03	409 381 409 220 249	05 27 55.00 05 28 03.00 05 28 05.00 05 28 06.00 05 28 06.00	006 00 0D 016 15 00 * 011 36 00 280 00 00 016 28 00 *	66 33 00 33 00 00	
CLEVELND A O AMES IOWA MLWKEE A WIS PORTLAND ORE OAVIS CAL	41 29 46 N 42 01 43 N 42 58 07 N 45 29 19 N 38 19 48 N	278 12 16 266 20 59 271 51 05 237 22 27 238 31 12	220 294 46	05 28 15.00 05 28 15.00 05 28 16.70 07 06 30.00 07 10 07.80	016 43 00 ** 019 20 46 ** 261 30 00 013 07 00 ** 019 47 54 **	44 18 04 54 00 00 56 00 00	•
OENVR A COLO CHTTNGA TENN DAVIS CAL SACMTO A CAL MITAKA J	39 44 52 N 35 01 02 N 38 19 48 N 38 38 25 N 35 40 20 N	255 03 24 274 44 23 238 31 12 238 43 24 139 32 30	1625 229 180 50	07 10 15.60 08 30 08.06 08 52 53.80 09 38 59.71 12 15 29.30	180 00 00	25 00 00 85 00 00 22 23 00 71 12 00 15 42 00	•
TOKYO JAPAN TOKYO JAPAN TOKYO JAPAN SAPPORO J MITAKA J	35 40 11 N 35 40 11 N 35 40 11 N 43 04 49 N 35 40 20 N	139 32 28 139 32 28 139 32 28 141 22 13 139 32 30	58 58 58 20 50	12 15 43.47 12 15 53.09 12 16 05.14 12 16 21.00 12 17 05.00	001 32 12 001 25 12 000 05 00	44 22 00 42 38 00 28 00 00	*

STATION	LATITU0E •	LONGI TUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION#	SLAN RANG IN K
			9 AUG 1958	3 (CONT)			
MITAKA J TOKYO JAPAN MITAKA J SAPPORO J HIROSHIMA J	35 40 20 N 35 40 11 N 35 40 20 N 43 04 49 N 34 22 08 N	139 32 30 139 32 28 139 32 30 141 22 13 132 28 10	50 58 50 20 3	12 17 08 10 13 57 37 46 13 58 27 70 13 58 41 00 13 58 50 00	059 36 00 012 47 12 * 333 12 00 016 37 00 * 003 30 00 *	16 00 00 62 36 00 * 29 12 00 43 00 00 * 87 00 00 *	
TOKYO JAPAN MITAKA J KANYAMACHI J KASHIWABRA J TOKYO JAPAN	35 40 11 N 35 40 20 N 34 03 46 N 34 30 24 N 35 40 11 N	13° 32 28 13° 32 30 135 15 10 135 48 15 13° 32 28	58 50 40 66 58	13 58 54 • 30 13 59 11 • 20 13 59 20 • 00 13 59 21 • 00 13 59 44 • 06	014 19 18 * 333 48 00 017 21 00 * 017 00 00 * 016 49 00 *	68 15 00 * 37 42 00 85 00 00 * 83 00 00 *	
KASHIWABRA J COPNGN A OEN COPNGN A DEN CHELMSFD ENG HORSBRDG ENG	34 30 24 N 55 44 41 N 55 44 41 N 51 43 00 N 50 53 00 N	135 48 15 012 33 09 012 33 09 000 30 00 000 15 00	66	15 58 28.00 20 42 25.04 20 42 32.00 20 42 33.00 20 42 40.00	013 25 00 # 014 13 00 # 014 56 00 # 001 36 00 # 034 00 00	78 00 00 * 78 00 00 * 72 48 00 * 73 40 00 * 58 00 00 *	
WELLS ENG WEESP NETH LNDSTRT NETH LNDSTRT NETH LNDSTRT NETH	52 58 00 N 52 18 12 N 52 37 39 N 52 37 39 N 52 37 39 N	000 52 00 005 02 21 004 44 58 004 44 58		20 42 41.00 20 42 57.30 20 43 07.00 20 43 15.80 20 43 25.20	000 46 00 * 000 09 12 * 000 48 24 * 000 31 36 * 000 17 30 *	32 00 00 57 00 00 * 56 12 00 * 62 54 00 * 60 18 00 *	
LNDSTRT NETH LNDSTRT NETH HORSBROG ENG WELLS ENG CAMBR U ENG	52 37 39 N 52 37 39 N 50 53 00 N 52 58 00 N 52 12 51 N	004 44 58 004 44 58 000 15 00 000 52 00 000 05 41	28	20 43 33.40 20 43 42.20 20 44 35.00 20 44 46.00 22 25 13.80	000 07 12 * 021 57 54 * 069 00 00 023 23 00 * 308 48 00	51 12 00 * 54 36 00 * 51 42 00 * 25 00 00 * 25 00 00 *	
BEXHILL ENG CAMBR U ENG FASSBURG GER CAMBR U ENG COPNGN A DEN	50 51 00 N 52 12 51 N 52 54 00 N 52 12 51 N 55 44 41 N	000 30 00 000 05 41 010 11 00 000 05 41 012 33 09	28 28	22 26 09.00 22 26 15.20 22 27 00.00 22 27 03.30 22 27 39.00	013 35 00 * 301 42 00 015 06 00 * 287 24 00 016 27 00 *	28 24 00 53 00 00 * 43 18 00 29 00 00 * 58 42 00 15 35 00 *	
CAMBR U ENG COPNGN A OEN CAMBR U ENG BEXHILL ENG WEESP NETH	52 12 51 N 55 44 41 N 52 12 51 N 50 51 00 N 52 18 12 N	000 05 41 012 33 09 000 05 41 000 30 00 005 02 21	28 28	22 27 39 • 10 22 27	260 18 00 016 27 00 * 213 06 00 229 00 00 019 18 00 *	69 18 00 15 48 00 * 70 36 00 77 00 00 13 24 00 *	
CAMBR U ENG CAMBR U ENG BEXHILL ENG CAMBR U ENG CAMBR U ENG	52 12 51 N 52 12 51 N 50 51 00 N 52 12 51 N 52 12 51 N	000 05 41 000 05 41 000 30 00 000 05 41	28 28 28 28 28	22 28 56.90 22 29 36.30 22 29 55.00 22 30 09.60 22 30 47.30	178 12 00 165 42 00 020 30 00 * 160 24 00 152 24 00	60 48 00 50 06 00 13 00 00 * 42 42 00 35 36 00	
PITTSBGH PA	40 29 00 N	280 00 00	381	23 52 00.00	004 30 00 *	83 00 00 *	
C. E. E. C.			10 AUG 1958				
CLEVELNO A O AMES A IOWA AMES A IOWA CLEVELND A O AMES A IOWA	41 29 46 N 42 01 59 N 42 01 59 N 41 29 46 N 42 01 59 N	278 12 16 266 22 00 266 22 00 278 12 16 266 22 00	220 305 305 220 305	01 52 00.00 03 31 59.00 03 33 18.00 03 33 47.00 03 34 03.00	001 04 00 * 357 00 00 019 12 00 352 42 00 030 12 00	35 08 00 <b>*</b> 15 06 00 20 18 00 25 36 00 22 24 00	
AMES IOWA AMES A IOWA CHI FAXN ILL AMES IOWA PITTS8GH PA	42 01 43 N 42 01 59 N 41 59 00 N 42 01 43 N 40 29 00 N	266 20 59 266 22 00 272 21 00 266 20 59 280 00 00	305 218 381	03 34 19.00 03 34 47.00 03 34 55.00 03 35 12.00 03 35 20.00	002 03 10 * 042 00 00 015 20 00 * 001 09 22 * 004 30 00 *	55 38 25 * 24 00 00 63 30 00 # 46 27 52 *	
DUNLAP ONTAR AMES A IOWA ST COLL PA FT BELVR VA CHI CPLN ILL	43 51 46 N 42 01 59 N 40 44 01 N 38 45 30 N 41 51 58 N	280 34 40 266 22 00 282 06 33 282 48 42 272 23 35	244 305 393 85 194	03 35 31.00 03 35 32.00 03 35 40.00 03 35 45.00 03 35 58.60	021 45 36 * 053 00 00 001 00 00 * 000 00 00	78 00 00 # 78 00 00 # 23 48 00 88 00 00 # 34 00 00	
CHI FAXN ILL AMES A IOWA OANVILLE ILL BRYN ATHN PA N CANTON A O	41 59 00 N 42 01 59 N 40 08 57 N 40 08 00 N 40 55 54 N	272 21 00 266 22 00 272 22 26 284 56 00 278 32 40	218 305 189 85 366	03 36 15.00 03 36 15.00 03 36 27.00 03 36 27.64 03 36 49.24	000 38 36 * 001 23 00 * 061 00 00 050 00 00 000 00 00 023 42 00 *	50 17 00 * 60 00 00 * 23 24 00 30 00 00 48 00 00	
ARLINGTON VA SCHNTOY A NY AMES A IOWA MILLBROOK NY PORTLAND ORE	38 50 48 N 42 53 32 N 42 01 59 N 41 51 30 N 45 29 19 N	282 53 35 285 58 57 266 22 00 286 22 33 237 22 27	59 235 305 243 46	03 37 05.00 03 37 33.20 03 38 10.00 03 38 13.00 05 10 01.00	023 10 30 * 020 47 00 * 082 30 00 020 55 00 * 006 00 00 *	55 30 00 * 70 42 00 * 45 18 00 * 18 18 00 44 10 00 *	
DAYTON B O AMES A IOWA	39 50 14 N 42 01 59 N	275 44 03 266 22 00	249 305	05 10 52.00 05 16 23.00	293 33 00 321 00 00	28 30 00 # 26 00 00 19 00 00	

		LONGITUDE	HE I GHT I N	TIME GMT IN	AZIMUTH OR	ELEVATION OR	SLAN'
STATION	LATITUDE	ĒAST	METERS	HR MIN SEC	RGT ASCEN #	OECLINATION*	IN K
			10 AUG 1958	(CONT)			
					-		
AMES A IOWA OANVILLE I <b>LL</b>	42 01 59 N 40 08 57 N	266 22 00 272 22 26	305 189	05 17 08.00 05 17 51.00	319 42 00 312 00 00	26 00 00 20 00 00	
AMES A IOWA PORTLAND ORE	42 01 59 N 45 29 19 N	266 22 00 237 22 27	305 46	05 18 00.00 05 18 01.00	316 00 00 000 06 00 *	35 30 00 28 30 00 #	
AMES A IOWA	42 01 59 N	266 22 00	305	05 18 19.00	314 42 00	40 00 00	
AMES A IOWA ST LOUIS MO	42 01 59 N 38 39 46 N	266 22 00 269 32 35	305 191	05 18 46.00 05 18 49.00	311 42 00 014 34 00 *	47 CO OO 55 O5 OO #	
CHI CPLN ILL AMES IOWA	41 51 58 N 42 01 43 N	272 23 35 266 20 59	194	05 18 56 10 05 19 02 00	015 26 48 <b>*</b> 016 26 43 <b>*</b>	40 40 00 # 54 15 59 #	
AMES A TOWA	42 01 59 N	266 22 00	305	05 19 12:00	306 42 00	54 00 00	
ST LOUIS MO	38 37 59 N 39 50 14 N	269 48 09 275 44 03	152 <b>24</b> 9	05 19 19.00 05 19 26.00	014 34 00 # 015 30 00 #	55 05 00 # 38 00 00 #	
AMES A IOWA	42 01 59 N 39 50 14 N	266 22 00 275 44 03	305 249	05 19 38 20 05 19 39 40	298 00 00 015 42 00 #	62 00 00	
OAYTON B O OAVIS CAL	38 19 48 N	23P 31 12	247	05 19 47.80	000 34 08 #	37 00 00 # 26 47 00 #	
CLEVELNO A O	41 29 46 N	278 12 16	220	05 19 48.00	283 54 00	28 12 00	
OAYTON B O AMES IOWA	39 50 14 N 42 01 43 N	275 44 03 266 20 59	249	05 19 51.50 05 19 55.00	015 53 00 * 018 09 28 *	36 10 00 * 45 16 11 *	
DENVR A COLO CHI FAXN ILL	39 44 52 N 41 59 00 N	255 03 24 272 21 00	1625 218	05 19 58 • 20 05 20 12 • 00	056 00 00 017 05 00 *	50 00 00 32 30 00 #	
DAYTON B O	39 50 14 N	275 44 03	249	05 70 22.00	016 22 00 *	33 10 00 #	
AMES A IOWA PORTLAND ORE	42 01 59 N 45 29 19 N	266 22 00 237 22 27	305 46	05 20 30.91 07 00 17.00	264 00 00 018 41 00 #	73 48 00 39 12 00 *	
OENVR A COLO OAVIS CAL	39 44 52 N 38 19 48 N	255 03 24 238 31 12	1625	07 02 16.20 07 02 52.90	288 00 00 019 53 50 *	23 00 00 56 34 00 #	
SACMTO E CAL	38 32 55 N	238 14 51	15	08 44 52.80	015 42 37 *	21 03 00 *	
PORTLANO ORE CAROC CAN	45 29 19 N 46 47 10 N	237 22 27 288 43 45	46 91	08 44 54.00 11 25 40.11	016 32 00 # 013 48 00 #	08 48 00 # 48 48 00 #	
CAROC CAN SAPPORO J	46 47 10 N 43 04 49 N	288 43 45 141 22 13	91 20	11 25 57.90 12 06 17.00	014 19 00 * 001 10 00 *	48 54 00 <b>*</b> 57 00 00 <b>*</b>	
TOKYO JAPAN	35 40 11 N	139 32 28	58	12 07 17.30	001 50 12 *	51 00 00 #	
TOKYO JAPAN	35 40 11 N	139 32 28	58	12 07 36.50	001 31 36 *	48 12 00 #	
HGSHMTSYMA J HIROSHIMA J	36 02 22 N 34 22 08 N	139 23 54 132 28 10	31	13 50 38.00 13 50 55.00	014 30 00 #	62 00 00 <b>*</b> 89 00 00 <b>*</b>	
SAPPORO J	43 04 49 N	141 22 13	20	13 51 08.00	017 04 00 *	34 00 00 *	
TOKYO JAPAN TOKYO JAPAN	35 40 11 N 35 40 11 N	139 32 28 139 32 28	58 58	13 51 09.00 13 51 18.60	015 17 36 * 015 37 12 *	64 20 00 <b>*</b> 64 14 00 <b>*</b>	
TOKYO JAPAN JOKNN OB FIN	35 40 11 N 60 48 50 N	139 32 28 023 30 09	58 103	13 51 30•60 20 32 04•30	016 03 18 <b>*</b> 289 06 00	63 50 00 <b>*</b> 16 30 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	20 32 20.60	286 42 00	18 36 00	
JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	20 32 34.60 20 32 49.40	284 18 00 281 48 00	20 30 00 22 <b>24 0</b> 0	
JOKNN CB FIN BEXHILL ENG	60 48 50 N 50 51 00 N	023 30 09 000 30 00	103	20 33 04.80 20 33 16.00	278 30 00 003 00 00	24 48 00 25 00 00	
JOKNN OB FIN	60 49 50 N	023 30 09	103	20 33 24.00	273 48 00	27 36 00	
JOKNN OB FIN BERLN SG GER	60 48 50 N 52 28 30 N	023 30 09 013 20 30	103 50	20 33 36.00 20 33 44.80	270 36 00 331 24 00	29 24 00 33 54 00	
JOKNN OB FIN PIC MIOI FR	60 48 50 N 42 56 12 N	023 30 09 000 08 32	103 2862	20 33 47.70 20 33 51.00	267 06 00 011 0 <b>6 0</b> 0	31 06 00 11 54 00	
COPNGN A DEN	55 44 41 N	012 33 09		20 33 52.00	013 12 00 *	55 20 00 *	•
BERLN SG GER PIC MIDI FR	52 28 30 N 42 56 12 N	013 20 30 000 08 32	50 2862	20 34 00.00 20 34 00.30	334 06 00 013 00 00	38 00 00 12 18 00	
JOKNN OB FIN PIC MIDI FR	60 48 50 N 42 56 12 N	023 30 09 000 08 32	103 2862	20 34 62.49 20 34 08.00	262 12 00 014 30 00	33 18 00 12 48 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	20 34 15.00	257 42 00	34 54 00	
PIC MIDI FR BERLN SG GER	42 56 12 N 52 28 30 N	000 08 32 013 20 30	2862 50	20 34 18 00 20 34 18 40	016 36 00 ° 337 36 00	13 18 00 43 12 00	
PIC MIOI FR BEXHILL ENG	42 56 12 N 50 51 00 N	000 08 37	2862	20 34 25.50 20 34 26.00	018 00 00 035 00 00	13 48 00 33 00 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 34 28.60	340 24 OC	46 18 00	
JOKNN OB FIN CHELMSFO ENG	60 48 50 N 51 43 00 N		103	20 34 30.30 20 34 36.00		36 36 00 56 00 00	
BERLN SG GER	52 28 30 N	013 20 30	50.	20 34 38 10	000 46 00 343 00 00	49 12 00	
JOKNN OB FIN PIC MIO1 FR	60 48 50 N 42 56 12 N		103 2862	20 34 44.00 20 34 44.50		38 00 00 14 18 00	
COPNGN A OEN				20 34 45.00			
BERLN SG GER PIC MIDI FR	52 28 30 N 42 56 12 N	000 08 32	7862	20 34 48 20 20 34 55 00	024 06 00	52 18 00 14 42 00	
BERLN SG GER JOKNN OB FIN				20 34 56 50 20 34 57 30		55 06 00 38 54 00	

STATION	<b>L</b> ATITUDE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION*	SLAN RANG IN K
			10 AUG 1958	(CONT)			
HANOVR F GER BERLN SG GER JOKNN OB FIN PIC MIOI FR BERLN SG GER	52 22 18 N 52 28 30 N 60 48 50 N 42 56 12 N 52 28 30 N	009 47 22 013 30 30 023 30 09 000 08 32 013 20 30	50 103 2862 50	20 35 05,40 20 35 07,00 20 35 09,00 20 35 09,00 20 35 14,40	022 36 06 # 355 48 00 234 24 00 027 18 00 000 30 00	63 00 00 * 58 36 00 39 30 00 15 06 00 61 00 00	
PIC MIOI FR	42 56 12 N	000 08 32	2662	20 35 18.00	029 06 00	15 18 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	20 35 21.60	228 30 00	39 48 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 35 22.90	007 00 00	63 18 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 35 27.50	031 00 60	15 36 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 35 34.10	017 36 00	66 00 00	
PIC MIDI FR	42 56 12 N	000 08 32	2852	20 35 36.00	032 54 00	15 42 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	20 35 39.60	220 18 00	39 36 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 35 43.00	027 36 00	67 36 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 35 47.50	035 12 00	15 54 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 35 53.10	039 36 00	68 30 00	
PIC MIDI FR COPMGN A DEN JOKNN OB FIN PIC MIDI FR BERLN SG GER	42 56 12 M 55 44 41 N 60 48 50 N 42 56 12 N 52 28 30 N	000 08 32 012 33 09 023 30 09 000 08 32 013 20 30	2862 102 2862 50	20 35 54.50 20 35 55.00 20 35 56.70 20 36 02.50 20 36 04.70	037 00 00 020 19 00 * 213 00 00 038 48 00 054 30 00	16 00 00 41 00 00 # 38 48 00 16 00 00 58 18 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 36 10,50	040 18 00	16 06 CC	
BERLA SG GER	52 28 30 N	013 20 30	50	20 36 13.50	055 06 00	67 18 00	
JOKAN OB FIN	60 48 50 N	023 30 09	103	20 36 16.30	205 24 00	37 24 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	20 36 22.00	042 42 00	16 06 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 36 22.00	073 54 00	65 54 CO	
JOKNN OB FIN	60 48 50 N	023 30 09	103	20 36 28.80	201 00 00	36 18 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 36 31.00	044 48 00	16 06 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 36 31.00	031 48 00	64 00 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 36 38.00	046 06 00	16 00 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 36 38.80	057 42 00	62 06 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	20 36 45.00	195 48 00	34 42 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 36 46.60	092 24 00	60 00 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 36 48.00	046 06 00	16 00 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 36 54.80	096 24 00	57 54 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 36 59.50	050 12 00	15 54 00	
BERLN SG GER	52 28 30 N	013 20 30	55	20 37 01.90	099 30 00	55 54 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	20 37 05.50	051 36 00	15 54 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 37 09.80	102 30 00	53 48 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	20 37 12.00	188 30 00	31 48 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	20 37 15.00	053 18 00	15 42 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 37 16 10	104 30 00	52 06 00	
PIC MIOI FR	42 56 12 N	600 08 32	2862	20 37 23 50	054 54 00	15 30 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 37 25 90	106 42 00	50 06 00	
JOKNN OB FIN	60 49 50 K	023 30 09	103	20 37 29 20	184 42 00	29 54 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 37 30 80	108 30 00	48 24 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 37 31.00	056 18 00	15 18 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 37 38.10	110 06 00	46 48 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 37 39.50	058 00 00	15 00 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 37 45.90	111 36 00	45 00 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	20 37 48.70	180 54 00	27 48 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 37 49.00	059 30 00	14 48 00	•
BERLN SG GER	52 28 30 N	013 20 30	50	20 37 53.40	113 12 00	43 18 00	
PIC MIDI FR	42 56 12 N	000 08 32	<b>2</b> 862	20 37 58.50	061 12 00	14 36 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 38 01.40	114 18 00	41 42 00	
PIC MIDI FR	42 56 12 N	000 05 32	2862	20 38 06.00	062 24 00	14 18 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 38 08 10	115 24 00	40 18 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	20 38 09 00	177 36 00	25 42 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 38 15 80	116 18 00	38 48 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 38 17 50	064 12 00	13 54 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 38 25 50	065 30 00	13 42 00	
BERLN SG GER PIC MIDI FR BERLN SG GER JOKNN OB FIN PIC MIDI FR	52 28 30 N 42 56 12 N 52 28 30 N 60 48 50 N 42 56 12 N	013 20 30 000 0E 32 013 20 30 023 30 09 000 08 32	103	20 38 27.10 20 38 32.00 20 38 35.50 20 38 39.20 20 38 41.50	117 30 00 066 36 00 118 24 00 173 30 00 068 06 00	36 48 00 13 36 00 35 06 00 22 42 00 13 00 00	
BERLN SG GER PIC MIDI FR BERLN SG GER PIC MIDI FR BERLN SG GER	52 28 30 N 42 55 12 N 52 28 30 N 42 56 12 N 52 28 30 N	013 20 30 000 08 32	2862 50 2862	20 38 43.00 20 38 48.50 20 38 51.50 20 39 02.50 20 39 07.60	119 42 00 071 06 00	34 00 00 12 54 00 32 36 00 12 24 00 30 06 00	

STATION	LATITUDE	LDNGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATIC DR DECLINATION	SLANT RANGE IN KM
		:	1D AUG 1958	(CONT)			
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 39 11.00	072 12 00	12 00 00	
JOKNN DB FIN	60 48 50 N	023 30 09	103	20 39 14.20	169 42 00	19 36 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 39 15.90	121 24 00	29 00 60	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 39 18.50	073 12 00	11 48 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 39 23.50	022 02 30 *	04 45 00 *	
PIC MIDI FR	42 56 12 N	D00 08 32	2862	20 39 26.00	074 12 00	11 30 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 39 29.10	122 24 00	27 18 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 39 36.00	075 18 00	11 12 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 39 39.00	123 06 00	26 06 00	
PIC MIDI FR	42 56 12 N	000 D8 32	2862	20 39 44.50	076 00 00	10 54 00	
JDKNN DB FIN	60 48 50 N	023 30 09	103	20 39 46.70	166 54 00	17 00 00	
BERLN SG GER	52 28 30 N	013 20 30	30	20 39 48.20	123 30 00	25 00 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 39 52.00	077 48 00	10 42 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 39 55.60	123 54 00	24 12 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 40 04.00	078 42 00	10 12 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 40 04.40	124 18 00	23 12 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 40 11.50	079 42 00	09 54 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 40 14.60	124 36 00	22 12 00	
PIC MIDI FR	42 56 12 N	000 08 32	2662	20 40 19.00	080 24 00	09 42 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 40 24.90	125 12 00	21 06 00	
PIC MIOI FR PIC MIDI FR BERLN SG GER JOKNN DB FIN PIC MIDI FR	42 56 12 N 42 56 12 N 52 28 30 N 60 48 50 N 42 56 12 N	000 08 32 000 08 32 013 20 30 023 30 09 000 08 32	2862 2862 50 103 2862	20 40 25.50 20 40 34.00 20 40 34.30 20 40 36.50 20 40 42.50	080 54 00 082 00 00 125 24 00 163 36 00 082 48 00	09 18 00 08 54 00 20 12 00 13 18 00 03 36 00	
BERLN SG GER	52 28 30 N	013 20 30	50	20 40 44.30	125 36 00	19 18 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	20 40 51.00	083 48 00	08 18 00	
CAMBR U ENG	52 12 51 N	000 05 41	28	22 15 38.10	311 06 00	15 54 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 16 42.00	331 06 00	10 42 00	
CAMBR U ENG	52 12 51 N	000 05 41	26	22 16 47.50	306 48 00	26 48 00	
BERLN SG GER PIC MIDI FR PIC MIDI FR PIC MIDI FR BERLN SG GER	52 28 30 N 42 56 12 N 42 56 12 N 42 56 12 N 52 28 30 N	013 20 30 000 08 32 000 08 32 000 08 32 013 20 30	50 2862 2862 2862 50	22 16 48.30 22 16 51.60 22 17 00.00 22 17 09.00 22 17 10.90	298 30 00 331 24 00 331 30 00 331 42 00 295 48 00	12 12 00 11 42 00 12 18 00 13 24 00 14 12 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 17 17.50	331 54 00	14 30 00	
CAMBR U ENG	52 12 51 N	000 05 41	28	22 17 32.50	301 24 00	31 06 00	
BERLN SG GFR	52 28 30 N	013 20 30	50	22 17 33.40	292 36 00	16 18 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 17 35.00	332 42 00	16 36 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	22 17 43.50	333 06 00	17 42 00	
BERLN SG GER	52 28 30 N	013 20 30	50	22 17 46.20	290 54 00	17 42 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 17 51.50	333 30 00	18 42 00	
BERLN SG GER	52 28 3D N	013 20 30	50	22 17 55.50	289 24 00	18 42 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 18 01.50	333 54 00	20 12 00	
BERLN SG GER	52 28 30 N	013 20 30	50	22 18 05.10	287 30 00	19 36 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 16 09.50	334 12 00	21 24 00	
CAMBR U ENG	52 12 51 N	000 05 41	28	22 18 15.30	292 06 00	47 18 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 18 18.00	334 48 00	22 48 00	
BERLN SG GER	52 28 30 N	013 20 30	50	22 18 26.60	263 30 00	21 48 00	
PIC MIDI FR	42 56 12 N	000 08 32	2862	22 18 27.50	335 18 00	24 12 00	
PIC MIDI FR BERLN SG GER PIC MIDI FR BERLN SG GER CDPNGN A DEN	42 56 12 N 52 28 30 N 42 56 12 N 52 28 30 N 55 44 41 N	000 08 32 013 20 30 000 08 32 013 20 30 012 33 09	2862 50 2862 50	22 18 35.50 22 18 35.70 22 18 45.00 22 18 45.60 22 18 51.00	335 48 00 281 54 00 336 24 00 279 48 00 015 48 00	25 42 00 22 42 00 27 06 00 23 42 00 - 16 45 00	
PIC MIDI FR CAMBR U ENG FASSBURG GER CDPNGN A DEN RERLN SG GER	42 56 12 N 52 12 51 N 52 54 00 N 55 44 41 N 52 28 30 N	000 08 32 000 05 41 010 11 00 012 33 09 013 20 30	2 862 28 50	22 18 55.00 22 18 59.20 22 19 00.00 22 19 00.04 22 19 00.80	278 36 00 015 01 00 0 015 56 00		
PIC MIDI FR PIC MIDI FR PIC MIDI FR BERLN SG GER PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 52 28 30 N 42 56 12 N	000 08 32 000 08 32 000 08 32 013 20 30 000 08 32	2862 2862 2862 50 2862	22	338 24 00 339 00 00 269 06 00	30 18 00 31 54 00 34 00 00 27 54 00 36 54 00	
CAMBR U ENG COPNGN A DEN PIC MIDI FR BERLN SG GER PIC MIDI FR	42 56 12 N	012 33 09 000 08 32 013 20 30	2862 50	22 19 33.60 22 19 35.00 22 19 38.50 22 19 44.30 22 19 46.00	016 36 00 341 06 00 265 18 00	65 36 00 12 10 00 38 24 00 29 06 00 40 00 00	*

STATION	LATITUOE	L <b>O</b> NGITUOE East	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SI
			10 AUG 19	58 (CONT)			
BERLN SG GER PIC MIOI FR BERLN SG GER WEESP NETH PIC MIOI FR	52 28 30 N 42 56 12 N 52 28 30 N 52 18 12 N 42 56 12 N	013 20 30 000 08 32 <b>013</b> 20 30 005 02 21 00 <b>0</b> 08 32	50 2862 50 2862	22 19 52.70 22 19 55.50 22 20 0.10 22 20 02.20 22 20 05.50	262 48 00 343 12 00 260 24 00 017 20 30 # 344 48 00	29 48 00 42 30 00 30 12 00 25 48 00 # 45 18 00	
BERLN SG GER CAMBR U ENG PIC MIOI FR BERLN SG GER PIC MIOI FR	52 28 30 N 52 12 51 N 42 56 12 N 52 28 30 N 42 56 12 N	013 20 30 000 05 41 000 08 32 013 20 30 000 08 32	50 28 2862 50 2862	22 20 10.60 22 20 11.40 22 20 14.00 22 20 17.80 22 20 22.00	257 24 00 205 30 00 346 06 00 255 18 00 348 06 00	30 54 00 63 24 00 47 48 00 31 12 00 49 48 00	
BERLN SG GER PIC MIDI FR BERLN SG GER PIC MIOI FR BERLN SG GER	52 28 30 N 42 56 12 N 52 28 30 N 42 56 12 N 52 28 30 N	013 20 30 000 08 32 013 20 30 000 08 32 013 20 30	50 28 <b>6</b> 2 50 28 <b>6</b> 2 50	22 20 27.20 22 20 33.50 22 20 35.70 22 20 41.00 22 20 43.90	252 24 00 351 00 00 249 42 00 353 00 00 247 12 00	31 42 00 53 18 00 32 00 00 55 42 00 32 12 00	
PIC MIOI FR BERLN SG GER PIC MIOI FR CAMBR U ENG BERLN SG GER	42 56 12 N 52 28 30 N 42 56 12 N 52 12 51 N 52 28 30 N	000 08 32 013 20 30 000 08 32 000 05 41 013 20 30	2862 50 2862 28 50	22 20 49.50 22 20 51.60 22 20 56.50 22 20 57.10 22 21 00.80	356 00 00 244 24 00 358 00 00 180 00 00 241 24 00	58 00 00 32 24 00 60 18 00 53 42 00 32 20 00	
PIC MIOI FR BERLN SG GER PIC MIOI FR PIC MIOI FR BERLN SG GER	42 56 12 N 52 28 30 N 42 56 12 N 42 56 12 N 52 28 30 N	000 08 32 013 20 30 000 08 32 000 08 32 013 20 30	2862 50 2862 2862 50	22 21 04.00 22 21 11.30 22 21 11.50 22 21 17.00 22 21 20.30	218 00 00 238 30 00 006 24 00 009 42 00 235 36 00	62 30 00 32 36 00 64 42 00 66 18 00 32 36 00	,
PIC MIOI FR BERLN SG GER CAMBR U ENG BERLN SG GER BERLN SG GER	42 56 12 N 52 28 30 N 52 12 51 N 52 28 30 N 52 28 30 N	000 08 32 013 20 30 000 05 41 013 20 30 013 20 30	2862 50 28 50 50	22 21 24.00 22 21 29.70 22 21 30.20 22 21 37.10 22 21 45.10	015 06 00 232 42 00 170 54 00 230 36 00 228 30 00	68 00 00 32 18 00 46 06 00 32 12 00 31 57 00	
BERLN SG GER BERLN SG GER BERLN SG GER CAMBR U ENG BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 52 12 51 N 52 28 30 N	013 20 30 013 20 30 013 20 30 000 05 41 013 20 30	50 50 50 28 50	22 21 52 10 22 22 00 20 22 22 08 90 22 22 14 40 22 22 16 50	226 06 00 224 00 00 221 36 00 165 00 00 219 30 00	31 48 00 31 18 00 31 03 00 37 36 00 30 42 00	
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30 013 20 30 013 20 30	50 50 50 50	22 22 23 70 22 22 37 50 22 22 44 80 22 22 52 30 22 22 59 90	217 54 00 214 30 00 212 48 00 211 00 00 209 30 00	30 18 00 29 18 00 29 00 00 28 36 00 28 00 00	
PIC MIOI FR PIC MIDI FR CAMBR U ENG	42 56 12 N 42 56 12 N 52 12 51 N	000 08 32 000 08 32 000 05 41	2862 2862 28 11 AUG 199	22 23 00.00 22 23 07.50 22 46 10.80	109 12 00 113 00 00 290 24 00	62 18 00 60 24 00 48 00 00	
BERLN SG GER AMES A IOWA AMES A IOWA CAROC CAN CAROC CAN	52 28 30 N 42 01 59 N 42 01 59 N 46 47 10 N 46 47 10 N	013 20 30 266 22 00 266 22 00 288 43 45 288 43 45	50 305 305 91 91	02 21 24.85 03 24 17.00 03 25 12.00 03 25 40.10 03 25 57.90	227 30 00 008 00 00 021 00 00 013 48 00 # 014 19 00 #	29 48 00 19 12 00 22 42 00 48 48 00 # 48 54 00 #	
OUNLAP ONTAR AMES A IOWA ST LOUIS MO AMES A IOWA MILLBROOK NY	43 51 46 N 42 01 59 N 38 37 59 N 42 01 59 N 41 51 30 N	280 34 40 265 22 00 269 48 09 266 22 00 286 22 33	244 305 152 305 243	03 26 30.50 03 26 31.00 03 27 13.00 03 27 16.00 03 27 23.00	015 48 00 * 039 30 00 001 32 30 * 045 30 00 015 15 00 *	83 18 00 # 25 24 00 54 30 00 # 26 00 00 69 40 00 #	
OANVILLE ILL ARLINGTON VA SCHNTOY A NY AMES A IOWA OUNLAP ONTAR	40 08 57 N 38 50 48 N 42 53 32 N 42 01 59 N 43 51 46 N	272 22 26 282 53 35 285 58 57 266 22 00 280 34 40	189 59 235 305 244	03 29 09.00 03 29 10.40 03 29 29.70 03 29 30.00 03 29 36.10	070 00 00 022 11 00 * 020 31 00 * 079 30 00 021 57 54 *	32 30 00 -56 54 00 # 34 18 00 # 10 42 00	
OAYTON B O PORTLANO ORE ST LOUIS MO OAYTON B O SACMTO E CAL	39 50 14 N 45 29 19 N 38 37 59 N 39 50 14 N 38 32 55 N	275 44 03 237 22 27 269 48 09 275 44 03 238 14 51	249 46 152 249 15	05 01 57.00 05 07 59.00 05 10 31.00 05 10 52.00 05 10 56.90	015 30 00 * 000 42 30 * 016 21 30 * 293 33 00 000 26 54 *	25 12 00 # 31 00 00 # 48 00 00 # 47 08 00 # 26 00 00	
OENVR A COLO KANCITY MO WICHITA KAN SACMTO A CAL SACMTO A CAL	39 44 52 N 39 02 02 N 37 41 44 N 38 38 25 N 38 38 25 N	255 03 24 265 25 08 262 45 19 238 43 24 238 43 24	1625 259 413 180 180	05 11 20.40 05 11 41.00 05 12 10.10 06 54 28.50 08 36 16.90	052 15 00 017 54 00 * 019 56 00 * 019 23 00 * 015 39 51 *	29 53 00 *  55 30 00  54 24 00 *  58 06 00 *  50 09 00 *  19 14 00 *	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR OECLINATION*	SLAM RANG IN P
KOCHI J CHIBA J SAPPORO J KANAGAWA J KOCHI J	33 33 25 N 35 51 29 N 43 04 49 N 35 26 34 N 33 33 25 N	133 30 35 139 58 14 141 22 13 139 21 16 133 30 35	30 10 20 51 30	12 00 18.00 17 42 04.00 13 42 13.00 13 42 13.00 13 42 24.00	000 33 00 * 006 10 00 * 016 39 00 * 015 00 00 * 015 23 00 *	35 00 00 * 87 00 00 * 32 00 00 * 73 00 00 *	
KAGOSHIMA J SAPPORO J MT FUJI J CHIBA J OFFIT AF NEB	31 31 34 N 43 04 49 N 35 31 21 N 35 51 29 N 41 06 00 N	130 31 47 141 22 13 138 48 50 139 56 14 264 96 00	13 20 815 10	13 42 33.00 13 42 46.00 13 43 02.00 13 43 07.00 20 06 30.00	000 56 00 # 017 20 00 # 315 00 00 023 37 00 # 300 00 00	84 00 00 # 26 00 00 # 50 00 00 77 00 00 #	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	20 23 13 20 20 23 24 10 20 23 37 10 20 23 51 40 20 24 02 40	286 48 00 285 06 00 282 48 00 289 06 00 277 42 00	83 26 00 17 24 00 18 42 00 20 24 00 22 18 00	
JOKNN OB FIN BERLN SG GER JOKNN OB FIN BERLN SG GER COPNGN A DEN	60 48 50 N 52 28 30 N 60 48 50 N 52 28 30 N 55 44 41 N	023 30 09 013 20 30 023 30 09 013 20 30 012 33 09	103 50 103 50	20 24 19.80 20 24 31.30 20 24 36.00 20 24 38.80 20 24 44.92	273 36 09 327 00 00 269 18 00 327 54 00 012 57 00 **	23 48 00 26 06 00 31 12 00 28 24 00 33 06 00	
JOKNN OB FIN BERLN SG GER BERLN SG GER JOKNN OB FIN BERLN SG GER	60 48 50 N 52 28 30 N 52 28 30 N 60 48 50 N 52 28 30 N	023 30 09 013 20 30 013 20 30 023 30 09 013 20 30	103 50 50 103 50	20 24 47.40 20 24 48.70 20 24 56.70 20 25 04.50 20 25 05.70	265 48 00 329 00 00 329 54 00 260 18 00 331 00 00	30 00 00 35 42 00 37 42 00 32 06 00	
BERLN SG GER JOKNN OB FIN BERLN SG GER JOKNN OB FIN BERLN SG GER	52 28 30 N 60 48 50 N 52 28 30 N 60 48 50 N 52 28 30 N	013 20 30 023 30 09 013 20 30 023 30 09 013 20 30	50 103 50 103 50	20 25 14.80 20 25 18.40 20 25 23.30 20 25 28.80 20 25 31.20	332 30 00 255 24 00 334 06 00 251 24 00 335 48 00	40 12 00 43 00 00 33 42 00 45 42 00 35 48 00	
HORSBROG ENG BERLN SG GER JOKNN OB FIN BERLN SG GER JOKNN OB FIN	50 53 00 N 52 28 30 N 60 48 50 N 52 28 30 N 60 48 50 N	000 15 00 013 20 30 023 30 09 013 20 30 023 30 09	50 103 50 103	20 25 40 00 20 25 40 50 20 25 47 30 20 25 47 70 20 25 57 40	040 00 00 338 06 00 243 54 00 340 12 00 239 42 00	48 06 00 35 00 00 51 05 00 36 24 00 53 48 00	
BERLN SG GER BERLN SG GER JOKNN OB FIN BERLN SG GER JOKNN OB FIN	52 28 30 N 52 28 30 N 60 48 50 N 52 78 30 N 60 48 50 N	013 20 30 013 20 30 023 30 09 013 20 30 023 30 09	50 50 103 50	20 25 57.60 20 26 05.40 20 26 06.30 20 26 14.80 20 26 16.60	344 12 00 347 30 00 235 54 00 353 06 00 231 24 00	36 54 00 57 30 00 60 06 00 37 18 00 63 30 00	
BERLN SG GER JOKNN OB FIN BERLN SG GER BERLN SG GER JOKNN OB FIN	52 28 30 N 60 48 50 N 52 28 30 N 52 28 30 N 60 48 50 N	013 20 30 023 30 09 013 20 30 013 20 30 023 30 09	50 103 50 50 103	20 26 23 • 70 20 26 27 • 60 20 26 32 • 20 20 26 40 • 50 20 26 44 • 00	359 36 00 226 42 00 008 00 00 017 18 00 220 00 00	37 30 00 66 30 00 37 36 00 69 06 00 71 05 00 37 24 00	
BERLN SG GER JOKNN OB FIN BERLN SG GER JOKNN OB FIN BERLN SG GER	52 28 30 N 60 48 50 N 52 28 30 N 60 48 50 N 52 28 30 N	013 20 30 023 30 09 013 20 30 023 30 09 013 20 30	50 103 50 103 50	20 26 53.40 20 26 58.10 20 27 02.80 20 27 06.60 20 27 14.20	037 24 00 214 24 00 053 00 00 211 06 00 070 12 00	73 12 00 36 42 00 73 12 00 36 12 00	
JOKNN OB FIN BERLN SG GER BERLN SG GER JOKNN OB FIN BERLN SG GER	60 48 50 N 52 28 30 N 52 28 30 N 60 48 50 N 52 28 30 N	023 30 09 013 20 30 013 20 30 023 30 09 013 20 30	103 50 50 103 50	20 27 18.70 20 27 24.10 20 27 31.30 20 27 34.40 20 27 39.90	206 54 00 082 18 00 088 48 00 201 42 00 095 06 00	71 54 00 35 18 00 69 42 00 67 48 00 34 06 00 65 12 00	
JOKNN OB FIN BERLN SG GER BERLN SG GER JOKNN OB FIN BERLN SG GER	60 48 50 N 52 28 30 N 52 28 30 N 60 48 50 N 52 28 30 N	023 30 09 013 20 30 013 20 30 023 30 09 013 20 30	103 50 50 103	20 27 45 80 20 27 46 70 20 27 55 50 20 28 00 70 20 28 02 30	198 18 00 099 36 00 103 48 00 194 18 00 106 30 00	33 05 00 63 12 00 60 30 00 31 36 00 58 30 00	
BERLN SG GER JOKNN OB FIN BERLN SG GER BERLN SG GER ATHENS GR	52 28 30 N 60 48 50 N 52 28 30 N 52 28 30 N 37 58 19 N	013 20 30 023 30 09 013 20 30 013 20 30 023 43 01	50 103 50 50	20 28 08.90 20 28 15.30 20 28 15.80 20 28 23.70 20 28 29.56	108 54 00 194 18 00 110 54 00 112 54 00 010 10 00 *	56 30 00 30 12 00 54 36 00 52 18 00 76 24 00 *	
BERLN SG GER JOKNN OB FIN BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 60 48 50 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 023 30 09 013 20 30 013 20 30 013 20 30	50 103 50 50 50	20 28 31.70 20 28 38.20 20 28 39.40 20 28 48.70 20 28 55.90	114 42 00 185 54 00 116 12 00 117 30 00 118 30 00	50 06 00 27 54 00 48 00 00 45 00 00 44 12 00	
			-				

STATION	LATITUOE	LONGITUOE EAST`	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			11 AUG 1958	(CONT)			
JOKNN OB FIN BERLN SG GER BERLN SG GER BERLN SG GER JOKNN OB FIN	60 48 50 N 52 28 30 N 52 28 30 N 52 28 30 N 60 48 50 N	023 30 09 013 20 30 013 20 30 013 20 30 023 30 09	103 50 50 50 103	20 29 00.80 20 29 03.10 20 29 12.40 20 29 18.70 20 29 20.60	181 54 00 119 30 00 120 24 00 121 00 00 178 54 00	25 42 00 42 42 00 40 42 00 39 30 00 23 48 00	
BERLN SG GER BERLN SG GER BERLN SG GER ATHENS GR BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 37 58 19 N 52 28 30 N	013 20 30 013 20 30 013 20 30 023 43 01 013 20 30	50 50 50 110 50	20 29 24.80 20 29 32.60 20 29 38.50 20 29 40.41 20 29 45.00	121 54 00 122 18 00 123 00 00 000 57 00 * 123 24 00	38 12 00 36 48 00 35 48 00 86 30 00 <b>*</b> 34 42 00	·
BERLN SG GER ATHENS GR BERLN SG GER JOKNN OB FIN BERLN SG GER	52 28 30 N 37 58 19 N 52 28 30 N 60 48 50 N 52 28 30 N	013 20 30 023 43 01 013 20 30 023 30 09 .013 20 30	50 110 50 103 50	20 29 50 80 20 29 57 69 20 29 59 70 20 30 05 20 20 30 06 70	123 54 00 023 40 00 * 124 18 00 173 30 00 124 54 00	33 36 00 82 46 00 * 32 06 00 19 48 00 31 06 00	
BERLN SG GER ATHENS GR BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 37 58 19 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 023 43 01 013 20 30 013 20 30 013 20 30	50 110 50 50 50	20 30 13.40 20 30 15.84 20 30 21.90 20 30 27.60 20 30 34.00	125 00 00 023 10 00 # 125 30 00 126 00 00 126 06 00	30 12 00 76 54 00 * 29 00 00 28 12 00 27 18 00	
ATHENS GR JOKNN OB FIN BERLN SG GER BERLN SG GER BERLN SG GER	37 58 19 N 60 48 50 N 52 28 30 N 52 28 30 N 52 28 30 N	023 43 01 023 30 09 013 20 30 013 20 30 013 20 30	110 103 50 50 50	20 30 34 e84 20 30 35 e00 20 30 41 e90 20 30 49 e10 20 30 56 e50	023 06 00 * 170 36 00 126 18 00 126 48 00 127 00 00	70 24 00 <b>*</b> 17 24 00 26 30 00 25 48 00 24 48 00	0
BERLN SG GER JOKNN OB FIN BERLN SG GER ATHENS GR BERLN SG GER	52 28 30 N 60 48 50 N 52 28 30 N 37 58 19 N 52 28 30 N	013 20 30 023 30 09 013 20 30 023 43 01 013 20 30	50 103 50 110 50	20 31 03.80 20 31 04.20 20 31 10.10 20 31 17.18 20 31 22.10	127 12 00 168 18 00 127 42 00 023 08 00 # 128 00 00	23 54 00 15 12 00 23 06 00 59 06 00 * 21 54 00	
JOKNN OB FIN BERLN SG GER BERLN SG GER BERLN SG GER ATHENS GR	60 48 50 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 37 58 19 N	023 3C 09 013 20 30 013 20 30 013 20 30 023 43 01	103 50 50 50	20 31 27.00 20 31 28.90 20 31 35.70 20 31 42.20 20 31 45.69	166 48 00 128 12 00 128 18 00 128 30 00 023 22 00 *	13 42 00 21 06 00 20 30 00 20 00 00 03 00 00 *	
BERLN SG GER JOKNN OB FIN CAMBR U ENG CHELMSFO ENG CAMBR U ENG	52 28 30 N 60 48 50 N 52 12 51 N 51 43 00 N 52 12 51 N	013 20 30 023 30 09 000 05 41 000 30 00 000 05 41	50 103 28	20 31 50 60 20 31 52 90 22 08 06 40 22 10 29 00 22 10 49 90	127 54 00 165 12 00 301 36 00 017 12 00 * 226 00 00	19 06 00 10 54 00 30 18 00 36 00 00 * 61 18 00	٠
FARNHAM ENG BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	51 12 00 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	359 12 00 013 20 30 013 20 30 013 20 30 013 20 30	50 50 50	22 10 59 00 22 11 15 30 22 11 27 10 22 11 37 80 22 11 48 20	018 35 00 * 254 12 00 250 42 00 247 36 00 244 36 00	38 30 00 <b>*</b> 29 12 00 29 48 00 30 00 00 30 18 00	
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30 013 20 30 013 20 30	50 50 50 50	22 11 54 • 10 22 12 01 • 30 22 12 10 • 40 22 12 14 • 60 22 12 28 • 20	242 48 00 240 42 00 238 00 00 236 00 00 232 54 00	30 12 00 30 24 00 30 24 00 30 18 00 30 06 00	
FARNBORO ENG BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	51 18 00 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	359 12 00 013 20 30 013 20 30 013 20 30 013 20 30	50 50 50	22 12 31.50 22 12 35.00 22 12 42.10 22 12 48.50 22 12 55.90	019 55 00 # 231 18 00 229 30 00 227 30 00 225 36 00	10 00 00 <b>*</b> 30 00 <b>00</b> 29 48 00 29 48 00 29 24 00	
BERLN SG GER CAMBR U·ENG BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 52 12 51 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 000 05 41 013 20 30 013 20 30 013 20 30	50 28 50 50 50	22 13 02 • 40 22 13 06 • 50 22 13 12 • 30 22 13 23 • 80 22 13 31 • 20	224 06 00 169 48 00 221 36 00 218 42 00 217 18 00	29 12 00 . 37 54 00 28 42 00 28 18 00 27 48 00	
BERLN SG GER BERLN SG GER BERLN SG GER CAMBR U ENG CHELMSFO ENG	52 28 30 N 52 28 30 N 52 28 30 N 52 12 51 N 51 43 00 N	013 20 30 013 20 30 013 20 30 000 05 41 000 30 00	50 50 50 28	22 13 40 • 30 22 13 50 • 40 22 13 59 • 00 22 13 59 • 60 23 13 23 • 00	215 06 00 213 06 00 211 24 00 163 54 00 020 11 00 **	27 18 00 26 48 00 26 18 00 29 54 00 - 00 30 00 *	
CAMBR U ENG CAMBR U ENG	52 12 51 N 52 12 51 N	000 05 41 000 05 41	28 28	23 14 56.60 23 17 48.20	275 48 00 222 06 00	31 18 00 37 54 00	

STATION	LATI7J0E	LONGI TUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLAP RANG IN P
			12 AUG 195	e .			
GR TRK A BWI CAROC CAN CLEVELNO A O AMES A IOWA AMES A IOWA	21 25 59 N 46 47 10 N 41 29 46 N 42 01 59 N 42 01 59 N	288 51 16 288 43 45 278 12 16 266 22 00 266 22 00	91 220 305 305	00 11 00.00 01 32 39.00 01 35 45.00 03 14 13.00 03 15 05.00	178 16 48 001 53 00 * 000 16 30 * 000 00 00 359 30 00	21 52 12 63 30 00 * 27 42 00 * 15 18 00 20 42 00	
AMES A IOWA MILLBROOK NY AMES A IOWA AMES IOWA AMES A IOWA	42 01 59 N 41 51 30 N 42 01 59 N 42 01 43 N 42 01 59 N	266 22 00 286 27 33 266 22 00 265 20 59 266 22 00	305 243 305 305	03 15 41 00 03 16 00 00 03 16 34 00 03 16 42 00 03 17 09 00	017 30 00 012 10 00 * 032 00 00 001 33 30 * 042 00 00	23 06 00 57 30 00 # 26 18 00 58 44 03 #	
AMES IOWA AMES A IOWA CHI FAXN ILL AMES A IOWA AMES A IOWA	42 01 43 N 42 01 59 N 41 59 00 N 42 01 59 N 42 01 59 N	266 20 59 266 22 00 272 21 00 266 22 00 266 22 00	305 218 305 305	03 17 26.00 03 17 44.00 03 17 57.40 03 18 21.00 03 18 56.00	000 43 11 # 052 30 00 000 07 00 # 062 30 00 070 30 00	27 42 00 50 12 28 # 28 00 00 58 50 00 # 27 12 00	
N CANTON A O AMES A IOWA SCHNTOY A NY CHI FAXN ILL AMES A IOWA	40 55 54 N 42 01 59 N 42 53 32 N 41 59 00 N 42 01 59 N	278 32 40 266 22 00 285 58 57 272 21 00 266 22 00	366 305 235 218 305	03 19 09.00 03 19 32.00 03 20 11.40 03 20 22.60 03 20 26.00	022 34 00 * 078 30 00 019 50 00 * 023 01 00 * 086 30 00	26 12 00 58 10 00 * 24 42 00 33 00 00 * 21 30 00 * 20 42 00	
CLEVELNO A O PORTLAND ORE AMES A IOWA AMES A IOWA	41 29 46 N 45 29 19 N 42 01 59 N 42 01 59 N 42 01 59 N	278 12 16 237 22 27 266 22 00 266 22 00 266 22 00	220 46 305 305 305	03 20 51.00 04 58 38.00 04 58 44.00 04 59 27.00 05 00 20.00	022 22 31 * 000 30 00 * 317 00 00 313 00 00 307 00 00	23 36 00 # 50 00 00 # 18 48 00 24 42 00 33 42 00	
AMES IOWA SACMTO E CAL AMES A IOWA N CANTON A O AMES A IOWA	42 01 43 N 38 32 55 N 42 01 59 N 40 55 54 N 42 01 59 N	266 20 59 238 14 51 266 22 00 278 32 40 266 22 00	15 305 <b>366</b> 305	05 00 54.00 05 01 00.80 05 01 05.00 05 01 47.00 05 01 48.00	015 29 38 * 000 29 12 * 298 00 00 015 28 00 * 285 00 00	47 03 24 * 36 42 00 * 43 18 00 25 40 00 * 52 48 00	
CHI CPLN ILL AMES IOWA OENVR A COLO OAYTON B O AMES A IOWA	41 51 58 N 42 01 43 N 39 44 52 N 39 50 14 N 42 01 59 N	272 23 35 266 20 59 255 03 24 275 44 03 266 22 00	194 1625 249 305	05 01 50.20 05 01 55.00 05 01 55.20 05 01 57.00 05 02 24.86	015 59 26 # 017 04 13 # 045 00 00 015 30 00 # 265 00 00	30 45 12 * 39 12 01 * 60 00 00 31 00 00 * 60 12 00	
OAVIS CAL PORTLANO ORE SACMTO E CAL SACMTO E CAL SENOAI J	38 19 48 N 45 29 19 N 38 32 55 N 38 32 55 N 38 15 22 N	238 31 12 237 22 27 238 14 51 238 14 51 140 51 56	46 15 15 45	05 10 01.05 06 43 47.00 06 44 51.60 08 26 56.90 13 33 42.00	000 29 12 * 018 06 30 * 018 20 22 * 015 33 25 *. 286 18 00	36 42 00 * 29 54 00 * 51 21 00 * 17 49 00 * 50 18 00	
KANYAMACHI J MLWKEE A WIS ATHENS GR GRONNGN NETH JOKNN OB FIN	34 03 46 N 42 58 07 N 37 56 19 N 53 12 18 N 60 48 50 N	135 15 10 271 51 05 023 43 01 006 34 01 023 30 09	40 294 110	13 33 44.00 20 00 28.22 20 10 24.50 20 15 27.00 20 15 52.10	017 40 00 * 035 00 00 021 55 00 * 000 58 48 * 246 00 00	68 00 00 # 39 30 00 7 78 24 00 # 87 54 00 # 34 00 00	
JOKNN OB FIN BERLN SG GER JOKNN OB FIN BERLN SG GER PIC MIOI FR	60 48 50 N 52 28 30 N 60 48 50 N 52 28 30 N 42 56 12 N	023 30 09 013 20 30 023 30 09 013 20 30 000 08 32	103 50 103 50 2862	20 16 01.00 20 16 03.70 20 16 10.20 20 16 11.40 20 16 17.50	244 24 00 315 00 00 240 42 00 317 36 00 024 54 00	34 36 00 54 42 00 35 12 00 57 54 00 17 18 00	
BERLN SG GER JOKNN OB FIN PIC MIOI FR BERLN SG GER GRONNGN NETH	52 28 30 N 60 48 50 N 42 56 12 N 52 28 30 N 53 12 18 N	013 20 30 023 30 09 000 08 32 013 20 30 006 34 01	50 103 2862 50	20 16 19.00 20 16 25.30 20 16 26.50 20 16 28.10 20 16 33.70	320 00 00 234 42 00 027 06 00 324 00 00 021 53 18 *	60 48 00 35 42 00 17 30 00 64 12 00 62 24 00 **	
PIC MIOI FR BERLN SG GER JOKNN OB FIN PIC MIOI FR JOKNN OB FIN	42 56 12 N 52 28 30 N 60 48 50 N 42 56 12 N 60 48 50 N	000 08 32 013 20 30 023 30 09 000 08 32 023 30 09	2862 50 103 2862 103	20 16 36.00 20 16 36.40 20 16 37.50 20 16 47.00 20 16 47.20	029 06 00 329 00 00 229 48 00 031 42 00 225 48 00	17 48 00 37 36 00 35 54 00 18 00 00	
BERLN SG GER PIC MIOI FR JOKNN OB FIN BERLN SG GER PIC MIOI FR	52 28 30 N 42 56 12 N 60 48 50 N 52 28 30 N 42 56 12 N	013 20 30 000 08 32 023 30 09 013 20 30 000 08 32	50 2862 103 50 2862	20 16 52 80 20 16 56 00 20 16 57 40 20 17 03 40 20 17 04 00	345 18 00 034 00 00 222 00 00 001 48 00 035 42 00	73 48 00 18 18 00 35 42 00 76 24 00 18 30 00	
JOKNN OB FIN PIC MIOI FR BERLN SG GER PIC MIOI FR JOKNN OB FIN	60 48 50 N 42 56 12 N 52 28 30 N 42 56 12 N 60 48 50 N	023 30 09 000 08 32 013 20 30 000 08 32 023 30 09	103 2862 50 2862 103	20 17 09.20 20 17 10.50 20 17 12.00 20 17 20.00 20 17 23.70	217 24 00 037 06 00 019 48 00 039 30 00 211 18 00	35 12 00 1B 30 00 77 42 00 1B 42 00 34 30 00	

STATION	LATITUOE	LONGI TUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION#	i
			12 AUG 195	58 (CONT)			
BERLN SG GER PIC MIDI FR JOKNN OB FIN PIC MIOI FR BERLN SG GER	52 28 30 N 42 56 12 N 60 48 50 N 42 56 12 N 52 28 30 N	013 20 30 000 08 32 023 30 09 000 08 32 013 20 30	50 2862 103 2862 50	20 17 29 • 30 20 17 30 • 00 20 17 34 • 50 20 17 36 • 50 20 17 40 • 20	055 30 00 041 42 00 208 42 00 043 18 00 071 18 00	76 00 00 18 48 00 33 48 00 18 48 00 73 00 00	
PIC MIDI FR BERLN SG GER JOKNN OB FIN PIC MIDI FR BERLN SG GER	42 56 12 N 52 28 30 N 60 48 50 N 42 56 12 N 52 28 30 N	000 08 32 013 20 30 023 30 09 000 08 32 013 20 30	2862 50 103 2862 50	20 17 45.50 20 17 47.10 20 17 52.10 20 17 54.50 20 17 58.30	045 12 00 078 18 00 203 06 00 047 18 00 086 48 00	18 42 00 70 54 00 33 30 00 18 36 00 66 54 00	
JOKNN OB FIN BERLN SG GER PIC MIDI FR BERLN SG GER PIC MIDI FR	60 48 50 N 52 28 30 N 42 56 12 N 52 28 30 N 42 56 12 N	023 30 09 013 20 30 000 08 32 013 20 30 000 08 32	103 50 2862 50 2862	20 16 02.70 20 18 04.90 20 18 05.00 20 18 13.20 20 18 13.50	200 12 00 089 48 00 049 30 00 093 00 00 051 18 00	32 36 00 64 48 00 18 30 00 62 00 00 18 24 00	
JOKNN OB FIN PIC MIDI FR ATHENS GR JOKNN OB FIN BERLN SG GER	60 48 50 N 42 56 12 N 37 58 19 N 60 48 50 N 52 28 30 N	023 30 09 000 08 32 023 43 01 023 30 09 013 20 30	103 2862 110 103 50	20 18 16 10 20 18 22 50 20 18 24 50 20 18 29 20 20 18 30 70	196 48 00 053 18 00 010 23 00 *. 193 18 00 098 00 00	30 30 00 18 18 00 72 18 00 # 29 16 00 56 12 00	
PIC MIDI FR PIC MIDI FR BERLN SG GER JOKNN OB FIN PIC MIDI FR	42 56 12 N 42 56 12 N 52 28 30 N 60 48 50 N 42 56 12 N	000 08 32 000 08 32 013 20 30 023 30 09 000 08 32	2862 2862 50 103 2862	20 18 32 50 20 18 39 50 20 18 41 50 20 18 44 30 20 18 49 00	055 12 00 056 42 00 101 00 00 190 18 00 058 30 00	18 00 C0 . 17 54 00 53 00 00 27 54 00 17 42 00	
PIC MIOI FR ATHENS GR JOKNN OB FIN PIC MIDI FR JOKNN OB FIN	42 56 12 N 37 58 19 N 60 48 50 N 42 56 12 N 60 48 50 N	000 08 32 023 43 01 023 30 09 000 08 32 023 30 09	2862 110 103 2862 103	20 18 57.50 20 18 59.50 20 19 00.00 20 19 05.00 20 19 13.60	060 06 00 910 13 00 * 187 18 00 061 48 00 184 54 00	17 30 00 80 06 00 # 26 24 00 17 18 00 25 12 00	
PIC MIDI FR PIC MIDI FR BERLN SG GER ATHENS GR JOKNN OB FIN	42 56 12 N 42 56 12 N 52 28 30 N 37 58 19 N 60 48 50 N	000 08 32 000 08 32 013 20 30 023 43 01 023 30 09	2862 2862 50 110 103	20 19 15.50 20 19 24.50 20 19 25.80 20 19 26.00 20 19 31.70	063 36 00 065 06 00 105 36 00 010 08 00 * 182 06 00	17 00 00 16 42 00 42 00 00 83 06 00 # 23 30 00	
BERLN SG GER PIC MIOI FR BERLN SG GER JOKNN OB FIN ATHENS GR	52 28 30 N 42 56 12 N 52 28 30 N 60 48 50 N 37 58 19 N	013 20 30 000 08 32 013 20 30 023 30 09 023 43 01	50 2862 50 103 110	20 19 34.40 20 19 35.50 20 19 43.80 20 19 50.20 20 19 52.00	106 06 00 066 54 00 106 48 00 179 30 00 021 37 00 *	40 00 00 16 18 00 38 12 00 21 54 00 89 24 CO *	
PIC MIOI FR BERLN SG GER PIC MIOI FR BERLN SG GER JOKNN OB FIN	42 56 12 N 52 28 30 N 42 56 12 N 52 28 30 N 60 48 50 N	000 08 32 013 20 30 000 08 32 013 20 30 023 30 09	2862 50 2862 50	20 19 53.00 20 19 53.20 20 20 04.50 20 20 08.10 20 20 10.00	070 06 00 107 30 00 071 54 00 108 12 00 177 06 00	15 30 00 36 18 00 15 00 00 33 48 00 20 18 00	
ATHENS GR PIC MIDI FR PIC MIDI FR BERLN SG GER ATHENS GR	37 58 19 N 42 56 12 N 42 56 12 N 52 28 30 N 37 58 19 N	023 43 01 000 08 32 000 08 32 013 20 30 023 43 01	110 2862 2862 50 110	20 20 10.00 20 20 12.50 20 20 18.50 20 20 18.70 20 20 24.50	021 46 00 * 073 00 00 073 48 00 108 48 00 021 55 00 *	85 00 00 # 14 48 00 14 36 00 32 06 00 78. 24 00 #	
PIC MIOI FR JOKNN OB FIN PIC MIOI FR PIC MIOI FR JOKNN OB FIN	42 56 12 N 60 48 50 N 42 56 12 N 42 56 12 N 60 48 50 N	000 08 32 023 30 09 000 08 32 000 08 32 023 30 09	2862 103 2862 2862 103	20 20 26.00 20 20 31.20 20 20 38.00 20 20 46.50 20 20 50.70	075 00 00 174 48 00 076 42 00 077 36 00 173 00 00	14 12 00 18 30 00 13 42 00 13 12 00 17 00 00	
ATHENS GR PIC MIOI FR PIC MIOI FR PIC MIOI FR JOKNN OB FIN	37 58 19 N 42 56 12 N 42 56 12 N 42 56 12 N 60 48 50 N	023 43 01 000 08 32 000 08 32 000 08 32 023 30 09	2862 2862 2862 2862 103	20 20 54.00 20 20 55.00 20 21 04.50 20 21 12.50 20 21 14.00	021 55 00 * 079 00 00 080 06 00 00 00 00 171 06 00	72 30 00 <b>*</b> 12 48 00 12 30 00 12 18 00 15 18 00	
ATHENS GR PIC MIDI FR PIC MIDI FR JOKNN OB FIN PIC MIDI FR	37 58 19 N 42 56 12 N 42 56 12 N 60 48 50 N 42 56 12 N	023 43 01 000 08 32 000 08 32 023 30 09 000 08 32	110 2862 2862 103 2862	20 21 20.50 20 21 22.00 20 21 31.00 20 21 37.60 20 21 39.50	021 45 00 * 082 24 00 083 24 00 169 18 00 084 24 00	63 00 00 # 11 48 00 11 18 00 13 42 00 10 48 00	
ATHENS GR PIC MIDI FR JOKAN OB FIN PIC MIDI FR PIC MIDI FR	37 58 19 N 42 56 12 N 60 48 50 N 42 56 12 N 42 56 12 N	023 43 01 000 08 32 023 30 09 000 08 32 000 08 32	110 2862 103 2862 2862	20 21 47.00 20 21 56.50 20 22 04.30 20 22 06.00 20 22 14.00	021 34 00 # 086 06 00 167 42 00 087 00 00 088 00 00	53 36 00 # 10 06 00 12 00 00 09 48 00 09 24 00	

STATION	LATITUDE		HEIGHT METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION DR OECLINATION*	SLANT RANGE IN KM
		1	2 AUG 1958	(CONT)			
PIC MIDI FR CAMBR U ENG PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 52 12 51 N 42 56 12 N 42 56 12 N 42 56 12 N	0D0 08 32 000 05 41 000 08 32 000 08 32 000 08 32	2862 28 2862 2862 2862	20 22 25.00 21 57 43.30 21 57 55.00 21 58 11.50 21 58 21.50	D88 54 00 303 48 00 328 24 00 328 24 00 328 30 00	D8 54 00 23 30 00 11 06 00 12 54 00 13 54 D0	
PIC MIDI FR RICHMONO ENG PIC MIDI FR CAMBR U ENG PIC MIDI FR	42 56 12 N 54 24 00 N 42 56 12 N 52 12 51 N 42 56 12 N	000 08 32 358 18 00 000 08 32 000 05 41 000 08 32	2862 2862 28 2862	21 58 29.50 21 58 37.00 21 58 38.50 21 58 39.50 21 58 46.50	328 36 00 014 30 00 * 328 42 00 295 42 00 328 48 00	14 54 00 38 30 00 4 16 06 00 33 48 00 17 D6 00	
PIC MIDI FR FARNHAM ENG PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 51 12 00 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 359 12 00 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862	21 58 55.00 21 59 03.00 21 59 04.00 21 59 13.00 21 59 22.00	329 06 00 013 52 00 * 329 06 00 329 18 00 329 30 00	18 12 00 48 00 00 * 19 42 00 20 54 00 22 24 00	
PIC MIOI FR PIC MIDI FR CAMBR U ENG PIC MIDI FR PIC MIOI FR	42 56 12 N 42 56 12 N 52 12 51 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 05 41 000 08 32 000 08 32	2862 2862 28 2862 2862	21 59 31 • 50 21 59 40 • 00 21 59 41 • 20 22 00 00 • 00 22 00 08 • 50	329 30 00 329 42 00 278 18 00 330 06 00 330 12 00	23 48 00 25 06 00 47 30 00 28 54 00 30 24 00	
PIC MIOI FR CAMBR U ENG PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 52 12 51 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 05 41 000 08 32 - 000 08 32 000 08 32	2862 28 2862 2862 2862	22 00 17.00 22 00 19.60 22 00 25.50 22 00 32.50 22 00 40.50	330 24 00 258 24 00 330 36 00 330 54 00 331 12 00	31 54 00 55 06 00 34 00 00 35 36 00 37 24 00	
PIC MIDI FR CAMBR U ENG PIC MIDI FR PIC MIDI FR PIC MIOI FR	42 56 12 N 52 12 51 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 05 41 000 08 32 000 08 32 000 08 32	2862 28 2662 2862 2862	22 00 50•50 22 00 59•10 22 01 08•00 22 01 17•00 22 01 28•00	331 18 00 230 30 00 331 48 00 332 12 00 332 54 00	39 00 00 57 48 00 42 12 00 44 54 00 47 54 00	
PIC MIDI FR CHELMSFO ENG PIC MIDI FR CAMBR U ENG PIC MIDI FR	42 56 12 N 51 43 00 N 42 56 12 N 52 12 51 N 42 56 12 N	000 08 32 000 30 00 000 08 32 000 05 41 000 08 32	2862 2862 28 2862	22 01 34.50 22 01 36.00 22 01 42.00 22 01 44.30 22 01 50.50	333 12 00 018 14 00 # 333 54 00 201 54 00 334 30 00	49 42 00 21 00 00 4 53 00 00 53 18 00 55 30 00	• 11
PIC MIDI FR PIC MIDI FR RICHMONO ENG PIC MIOI FR PIC MIDI FR	42 56 12 N 42 56 12 N 54 24 00 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 358 18 00 000 08 32 000 08 32	2862 2862 2862 2862	22 02 00.00 22 02 07.59 22 02 13.00 22 02 18.00 22 02 27.50	335 18 00 336 36 00 019 23 00 * 337 42 00 339 06 00	58 06 00 61 24 00 03 00 00 64 24 00 68 24 00	
PIC MIDI FR CAMBR U ENG PIC MIDI FR FARNBORD ENG CHELMSFO ENG	42 56 12 N 52 12 51 N 42 56 12 N 51 18 00 N 51 43 00 N	000 06 32 000 05 41 000 08 32 359 12 00 000 30 00	2862 28 2862	22 02 37.50 22 02 48.50 22 02 49.50 22 02 55.00 22 02 56.00	342 36 00 179 54 00 346 36 00 019 40 00 *		
HERSTMCX ENG PIC MIDI FR HERSTMCX ENG CAMBR U-ENG PIC MIDI FR	50 52 01 N 42 56 12 N 50 52 01 N 52 12 51 N 42 56 12 N	000 20 16 000 08 32 000 20 16 000 05 41 000 08 32	32 2862 32 28 2862	22 02 57.00 22 03 02.50 22 03 16.00 22 03 42.60 22 04 07.50		80 54 00 43 00 00 33 24 00	*
			13 AUG 1	958			
AMES A IOWA AMES A IOWA AMES A IOWA AMES A IOWA AMES A IOWA	42 01 59 N 42 01 59 N 42 01 59 N 42 01 59 N 42 01 59 N	266 22 00 266 22 00 266 22 00 266 22 00 266 22 00	305 305 305 305 305	03 04 10.56 03 04 54.62 03 05 29.18 03 06 06.00 03 06 32.00	005 18 00 012 48 00 021 18 00	15 12 00 19 54 00 22 54 00 26 12 00 28 00 00	
AMES A IOWA AMES IOWA AMES A IOWA AMES A IOWA ST LOUIS MO	42 01 59 N 42 01 43 N 42 01 59 N 42 01 59 N 38 39 46 N		305 305 305 191	03 06 50.00 03 07 14.00 03 07 15.00 03 07 51.00 03 07 55.00	000 41 41 041 48 00 082 18 00	29 42 00 29 42 00	
PITTSBGH PA CHI CPLN ILL AMES A IOWA AMES A IOWA N CANTON A O	42 01 59 N 42 01 59 N	272 23 35 266 22 00 266 22 00	381 194 305 305 366	03 07 59.50 03 08 24.20 03 08 27.00 03 09 02.00 03 09 17.00	0 023 25 49 0 063 18 00 0 071 48 00	* 53 22 30 29 18 00 27 48 00	•
AMES A IOWA AMES A IOWA CHI FAXN ILL	42 01 59 N 42 01 59 N 41 59 00 N	266 22 00	305 305 218	03 09 29 • 0 03 09 56 • 0 03 10 12 • 0	0 082 18 00	25 42 00 24 18 00 47 00 00	

STATION	LATITUOE	LONGITUOE EAST	HE IGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			13 AUG 1958	(CONT)			
AMES A IOWA PORTLANO ORE AMES A IOWA AMES A IOWA AMES A IOWA	42 01 59 N 45 29 19 N 42 01 59 N 42 01 59 N 42 01 59 N	266 22 00 237 22 27 266 22 00 266 22 00 266 22 00	305 46 305 305	03 10 22.94 04 47 36.00 04 48 06.91 04 48 50.97 04 49 27.26	088 48 00 001 40 00 * 315 18 00 312 48 00 309 18 00	22 42 00 70 18 00 <b>*</b> 13 54 00 19 36 00 23 12 00	
AMES A IOWA AMES A IOWA SACMTO E CAL AMES IOWA AMES A IOWA	42 01 59 N 42 01 59 N 38 32 55 N 42 01 43 N 42 01 59 N	266 22 00 266 22 00 238 14 51 266 20 59 265 22 00	305 15	04 50 12.19 04 50 39.84 04 50 56.30 04 51 03.00 04 51 06.62	303 48 00 299 48 00 000 17 12 * 015 34 18 * 293 18 00	31 18 00 36 42 00 37 57 00 * 43 02 42 * 42 18 00	
ALBUO-GS NM AMES A IOWA AMES IOWA EL PASO TEX AMES A IOWA	35 06 22 N 42 01 59 N 42 01 43 N 31 49 41 N 42 01 59 N	253 23 14 266 22 00 266 20 59 253 36 36 266 22 00	305	04 51 12.00 04 51 29.95 04 51 47.00 04 52 05.50 04 52 09.69	000 50 00 * 283 18 00 016 36 16 * 021 00 00 270 48 00	78 00 00 * 49 18 00 37 19 29 * 31 30 00 53 18 00	
DAYTON B O DENVR A COLO AMES IOWA AMES A IOWA BTLSVL-A OKL	39 50 14 N 39 44 52 N 42 01 43 N 42 01 59 N 36 42 18 N	275 44 03 255 03 24 265 20 59 266 22 00 264 03 36	1625 ( 305 (	04 52 19.50 04 52 28.80 04 52 31.00 04 52 41.66 04 52 57.50	015 40 00 088 00 00 017 32 56 * 251 48 00 017 58 45 *	26 30 00 65 30 00 28 47 00 * 57 18 00 53 38 00 *	÷
AMES A IOWA KANCITY MO PORTLANO ORE SACMTO E CAL SACMTO E CAL	42 01 59 N 39 02 02 N 45 29 19 N 38 32 55 N 38 32 55 N	266 22 00 265 25 08 237 22 27 238 14 51 238 14 51	259 ( 46 ( 15 (	04 52 59.80 04 53 04.50 06 31 08.00 06 34 45.80 08 16 57.70	240 18 00 018 04 00 * 014 04 00 * 017 49 03 * 015 29 51 *	57 48 00 39 40 00 * 45 24 00 * 48 26 00 * 16 12 00 *	
SAPPORO J KANYAMACHI J SAPPORO J SAPPORO J JOKNN OB FIN	43 04 49 N 34 03 46 N 43 04 49 N 43 04 49 N 60 48 50 N	141 22 13 135 15 10 141 22 13 141 22 13 023 30 09	40 20 20	13 21 42.00 13 23 23.00 13 24 43.00 13 31 42.00 20 04 50.80	015 31 00 * 017 05 00 * 017 33 00 * 015 31 00 * 259 06 00	32 00 00 # . 66 00 00 # 13 00 00 # 32 00 00 # 30 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103	20 05 04.80 20 05 17.90 20 05 32.90 20 05 45.80 20 05 59.30	254 18 00 249 42 00 244 06 00 239 18 00 234 06 00	31 24 00 32 24 00 33 24 00 34 00 00 34 24 00	
JOKNN OB FIN JOKNN OB FIN ATHENS GR JOKNN OB FIN BERLN SG GER	60 48 50 N 60 48 50 N 37 58 19 N 60 48 50 N 52 28 30 N	023 30 09 023 30 09 023 43 01 023 30 09 013 20 30	103 110 103	20 06 13.40 20 06 28.50 20 07 15.50 20 07 18.90 20 07 24.70	228 42 00 223 00 00 010 07 00 # 206 18 00 112 00 00	34 30 00 34 12 00 65 00 00 # 31 42 00 71 12 00	
JOKNN ON FIN BERLN SO GER BERLN SO GER JOKNN ON FIN BERLN SO GER	60 48 50 N 52 28 30 N 52 28 30 N 60 48 50 N 52 28 30 N	023 30 09 013 20 30 013 20 30 023 30 09 013 20 30	50 50 103	20 07 29.80 20 07 32.70 70 07 41.30 20 07 42.50 20 07 48.90	203 18 00 115 54 00 118 54 00 200 00 00 121 06 00	30 54 00 68 06 00 65 00 00 29 54 00 62 18 00	
JOKNN OB FIN ATHENS GR RERLN SG GER BERLN SG GER JOKNN OB FIN	60 48 50 N 37 58 19 N 52 28 30 N 52 28 30 N 60 48 50 N	023 30 09 023 43 01 013 20 30 013 20 30 023 30 09	110 50 50	20 07 51.70 20 07 52.00 20 07 55.40 20 08 02.70 20 08 10.70	197 42 00 010 13 00 # 122 48 00 124 00 00 193 24 00	29 12 00 69 00 00 <b>*</b> 60 00 00 57 36 00 27 30 00	
BERLN SG GER BERLN SG GER JOKNN OB FIN BERLN SG GER ATHENS GR	52 28 30 N 52 28 30 N 60 48 50 N 52 28 30 N 37 58 19 N	013 20 30 013 20 30 023 30 09 013 20 30 023 43 01	50 103 50	20 08 10.90 20 08 17.30 20 08 22.40 70 08 24.00 20 08 27.50	125 12 00 126 00 00 191 00 00 126 54 00 010 22 00 *	55 06 00 53 06 00 26 30 00 51 12 00 75 42 00 *	
BERLN SG GER JOKNN OB FIN BERLN SG GER BERLN SG GER JOKNN OB FIN	52 28 30 N 60 48 50 N 52 28 30 N 52 28 30 N 60 48 50 N	013 20 30 023 30 09 013 20 30 013 20 30 023 30 09	103 50 50	20 08 31.50 20 08 35.90 20 08 40.10 20 08 46.60 20 08 49.00	127 48 00 188 30 00 128 06 00 128 48 00 186 18 00	49 12 00 25 18 00 47 00 00 45 18 00 24 12 00	
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER JOKNN OB FIN	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 60 48 50 N	013 20 30 013 20 30 013 20 30 013 20 30 023 30 09	50 50 50	20 08 53.00 20 09 01.30 20 09 09.40 20 09 16.60 20 09 21.20	129 06 00 129 48 00 130 00 00 130 18 00 181 36 00	44 00 00 42 00 00 40 12 00 38 54 00 21 30 00	
BERLN SG GER JOKNN OB FIN ATHENS GR JOKNN OB FIN BERLN SG GER	52 28 30 N 60 48 50 N 37 58 19 N 60 48 50 N 52 28 30 N	013 20 30 023 30 09 023 43 01 023 30 09 013 20 30	103 110 103	20 09 24.00 20 09 35.90 20 09 36.00 20 09 48.90 20 09 49.00	130 48 00 179 48 00 017 39 00 * 178 12 00 132 00 00	37 18 00 20 12 00 85 54 00 * 19 18 00 33 00 00	

STATION	LAT1TU0E	LONGITUOE EAST	IN	TIME GMT IN R MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION SLANT OR RANGE DECLINATION* IN KM
			13 AUG 1958 (C	CONTI		DECLINATION* IN KM
ATHENS GR BERLN SG GER JOKNN OÐ FIN BERLN SG GER BERLN SG GER	37 58 19 N 52 28 30 N 60 48 50 N 52 28 30 N 52 28 30 N	023 43 01 013 20 30 023 30 09 013 20 30 013 20 30	110 20 50 20 103 20 50 20	0 09 57.00 0 10 01.20 0 10 07.50 0 10 11.50 0 10 20.50	020 15 00 <b>*</b> 132 00 00 176 24 00 132 30 00 132 42 00	81 36 00 # 31 06 00 17 48 00 29 54 00 28 18 00
JOKNN OB FIN BERLN SG GER ATHENS GR BERLN SG GER JOKNN OB FIN	60 48 50 N 52 28 30 N 37 58 19 N 52 28 30 N 60 48 50 N	023 30 09 013 20 30 023 43 01 013 20 30 023 30 09	50 20 110 20 50 20	0 10 21.30 0 10 29.00 0 10 30.50 0 10 36.80 0 10 40.70	175 06 00 132 54 00 021 10 00 # 133 00 00 173 24 00	16 48 00 27 12 00 70 36 00 <b>*</b> 26 12 00 15 24 00
BERLN SG GER ATHENS GR BERLN SG GER ATHENS GR JOKNN OB FIN	52 28 30 N 37 58 19 N 52 28 30 N 37 58 19 N 60 48 50 N	013 20 30 023 43 01 013 20 30 023 43 01 023 30 09	110 20 50 20 110 20	0 10 45.30 0 10 47.50 0 10 56.30 0 10 59.00 0 10 59.10	133 C6 00 021 21 00 * 133 12 00 021 33 00 * 171 54 00	25 12 00 67 42 00 # 24 00 00 60 42 00 #
BERLN SG GER ATHENS GR JOKNN OB FIN BERLN SG GER BERLN SG GER	52 28 30 N 37 58 19 N 60 48 50 N 52 28 30 N 52 28 30 N	013 20 30 023 43 01 023 30 09 013 20 30 013 20 30	50 20 110 20 103 20 50 20	0 11 06.80 0 11 14.50 0 11 14.90 0 11 14.90 0 11 25.80	133 30 00 021 31 00 * 170 48 00 133 42 00 133 54 00	14 06 00 22 48 00 56 30 00 # 13 06 00 22 00 00 20 54 00
JOKNN OB FIN BERLN SG GER ATHENS GR BERLN SG GER BERLN SG GER	60 48 50 N 52 28 30 N 37 53 19 N 52 28 30 N 52 28 30 N	023 30 09 013 20 30 023 43 01 013 20 30 013 20 30	50 20 110 20 50 20	0 11 30.00 0 11 34.30 0 11 34.56 0 11 45.70 0 11 51.90	169 48 00 134 00 00 021 29 00 * 134 06 00 134 12 00	12 12 00 20 00 00 51 24 00 * 19 00 00 18 30 00
JOKNN OB FIN ATHENS GR BERLN SG GER BERLN SG GER JOKNN OB FIN	60 48 50 N 37 58 19 N 52 28 30 N 52 28 30 N 60 48 50 N	023 30 09 023 43 01 013 20 30 013 20 30 023 30 09	110 20 50 20 50 20	0 11 53.90 0 11 59.50 0 12 00.50 0 12 09.70 0 12 09.90	168 30 00 021 27 00 * 134 30 00 134 42 00 167 30 00	10 42 00 41 36 00 * 17 42 00 16 54 00 09 42 00
HARROGTE ENG HARROGTE ENG BERLN SG GER BERLN SG GER BERLN SG GER	53 59 00 N 53 59 00 N 52 28 30 N 52 28 30 N 52 28 30 N	358 26 00 358 26 00 013 20 30 013 20 30 013 20 30	50 21 50 21	1 48 16.00 1 49 30.00 1 50 38.10 1 50 47.90 1 50 54.80	014 33 00 * 016 37 00 * 256 30 00 254 24 00	37 30 00 * 29 30 C0 * 25 30 C3 26 00 00 26 06 00
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30 013 20 30 013 20 30	50 21 50 21 50 21	1 51 01.20 1 51 09.30 1 51 17.70 1 51 25.80 1 51 33.40	252 48 00 250 36 00 248 24 00 246 12 00 244 18 00	26 24 00 26 30 C0 26 48 00 27 00 00 27 00 00
BERLN SG GER BERLN SG GER BERLN SG GER HARROGTE ENG BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 53 59 00 N 52 28 30 N	013 20 30 013 20 30 013 20 30 358 26 00 013 20 30	50 21 50 21 21	1 51 39.50 1 51 48.00 1 51 55.50 1 52 C2.00 1 52 O2.30	242 48 00 240 24 00 238 36 00 019 18 00 * 236 54 00	27 00 00 27 00 00 27 00 00 01 00 00 # 27 00 00
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30 013 20 30 013 20 30	50 21 50 21 50 21	1 52 08.60 1 52 15.30 1 52 22.10 1 52 41.50 1 52 47.70	235 12 00 233 42 00 232 00 00 227 18 00 226 00 00	26 54 00 26 42 00 26 30 00 26 00 00 25 48 00
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30 013 20 30 013 20 30	50 21 50 21 50 21	1 52 53.20 1 52 59.70 1 53 07.10 1 53 13.40 1 53 22.00	224 48 00 223 18 00 221 54 00 220 24 00 218 48 00	25 42 00 25 18 00 25 00 00 24 48 00 24 24 00
BERLN SG GER BERLN SG GER S FEPNNOO SP BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N 36 27 42 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 353 47 42 013 20 30 013 20 30	50 21 30 21 50 21	1 53 31.60 1 53 37.30 1 53 37.53 1 53 46.00 1 53 53.30	216 42 00 215 42 00 022 57 00 * 214 06 00 212 54 00	24 00 00 23 48 00 45 25 00 * 23 16 00 22 54 00
BERLN SG GER BERLN SG GER BERLN SG GER S FERNNOO SP	52 28 30 N 52 28 30 N 52 28 30 N 36 27 42 N	013 20 30 013 20 30 013 20 30 353 47 42	50 21 50 21 30 22	1 54 00.30 1 54 07.30 1 54 17.70 2 29 51.36	211 42 00 210 18 00 208 48 00 022 32 00 *	22 30 00 22 00 00 21 24 00 50 34 00 #
AMES A IOWA	42 01 59 N	266 22 00	14 AUG 1958 305 02	53 16.00		×
AMES A IOWA AMES A IOWA AMES A IOWA AMES A IOWA	42 01 59 N 42 01 59 N 42 01 59 N 42 01 59 N	266 22 00 266 22 00 266 22 00 266 22 00	305 02 305 02 305 02	2 54 00.00 2 54 27.00 2 54 53.00 2 55 30.00	354 18 00 031 48 00 006 48 00 013 48 00 022 18 00	15 00 00 18 42 00 21 48 00 23 54 00 27 54 00

STATION	LATITUOE		HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KN
		1	4 AUG 1958	(CONT)			
AMES A IOWA AMES IOWA OAYTON B O AMES A IOWA BUFFALO NY	42 01 59 N 42 01 43 N 39 50 14 N 42 01 59 N 42 58 00 N	266 22 00 266 20 59 275 44 03 266 22 00 281 24 00	305 249 305 229	02 56 13.00 02 56 21.00 02 56 32.50 02 56 41.00 02 56 47.00	035 48 00 000 39 43 * 002 02 00 044 48 00 015 20 00 *	30 18 00 58 20 47 * 33 49 00 31 18 00 72 00 00 *	
AMES A IOWA OUNLAP ONTAR AMES IOWA CHI FAXN ILL DAYTON B O	42 01 59 N 43 51 46 N 42 01 43 N 41 59 00 N 39 50 14 N	266 22 00 280 34 40 266 20 59 272 21 00 275 44 03	305 244 218 271	02 57 06.00 02 57 06.00 02 57 15.00 02 57 17.00 02 57 24.00	052 48 00 016 58 48 * 023 48 21 * 023 27 30 * 023 18 00 *	32 18 00 69 42 00 # 46 18 50 # 61 20 00 # 74 40 00 #	•
AMES A IOWA AMES IOWA OAYTON B O AMES A IOWA AMES A IOWA	42 01 59 N 42 01 43 N 39 50 14 N 42 01 59 N 42 01 59 N	266 22 00 266 20 59 275 44 03 266 22 00 266 22 00	305 249 305 305	02 57 34.00 02 57 50.00 02 58 03.00 02 58 08.00 02 58 36.00	060 48 00 023 29 59 * 023 37 00 * 069 18 00 076 48 00	31 18 00 38 12 26 * 57 30 00 * 30.24 00 29 12 00	
OANVILLE ILL CHI FAXN ILL AMES A IOWA AMES A IOWA OAYTON AFB O	40 08 57 N 41 59 00 N 42 01 59 N 42 01 59 N 39 47 00 N	272 22 26 272 21 00 266 22 00 266 22 00 274 55 00	189 218 305 305	02 58 43.90 02 59 02.00 02 59 03.00 02 59 38.00 02 59 49.63	061 24 00 022 35 00 * 082 48 00 089 48 00 023 12 00 *	40 36 00 30 30 00 * 27 12 00 24 00 00 30 30 00 *	
AMES A IOWA AMES A IOWA AMES A IOWA AMES A IOWA AMES A IOWA	42 01 59 N 42 01 59 N 42 01 59 N 42 01 59 N 42 01 59 N	266 22 00 266 22 00 266 22 00 266 22 00 266 22 00	305 305 305 305 305	03 00 05.09 04 27 54.00 04 28 54.00 04 29 06.00 04 29 40.99	093 48 00 311 48 00 309 18 00 304 48 00 299 48 00	22 42 00 17 36 00 21 42 00 26 48 00 33 18 00	
AMES IOWA AMES A IOWA AMES IOWA AMES A IOWA AMES IOWA	42 01 43 N 42 01 59 N 42 01 43 N 42 01 59 N 42 01 43 N	266 20 59 266 22 00 266 20 59 266 22 00 266 20 59	<b>305</b> 305	04 30 14.00 04 30 17.00 04 30 50.00 04 30 52.00 04 31 25.00	015 17 32 * 292 18 00 016 04 20 * 282 18 00 016 35 21 *	40 53 44 # 39 18 00 36 44 23 # 45 42 00 30 52 23 #	
AMES A IOWA AMES A IOWA AMES A IOWA ALMGOO-GS.NM OENVR A COLO	42 01 59 N 42 01 59 N 42 01 59 N 32 52 22 N 39 44 52 N	256 22 00 256 22 00 266 22 00 254 03 05 255 03 24	305 305 305 1339 1625	04 31 27.00 04 32 02.00 04 32 29.00 04 39 15.00 04 39 28.80	267 18 00 249 48 00 234 48 00 008 06 00 ** 350 45 00	50 48 00 54 18 00 54 48 00 76 54 00 * 44 30 00	
ALMGDO-GS; NM PORTLANO ORE ALBUG-GS NM CHI FAXN ILL EL PASO TEX	32 52 22 N 45 29 19 N 35 06 22 N 41 59 00 N 31 49 41 N	254 03 05 237 22 27 253 23 14 272 21 00 253 36 36	1339 46 1565 218	04 39 29.00 04 39 37.00 04 39 57.00 04 40 57.00 04 41 12.00	007 40 00 # 023 01 00 # 003 37 00 # 015 33 00 # 032 12 00	79 12 00 # 28 00 00 # 84 48 00 # 27 00 00 # 38 42 00	
S AN RAFB TX CHI CPLN ILL CHI FAXN ILL DANVILLE ILL ORGN PASS NM	29 32 06 N 41 51 58 N 41 59 00 N 40 08 57 N 32 25 24 N	261 42 33 272 23 35 272 21 00 272 22 26 253 26 51	232 194 218 189 1651	04 41 12.00 04 41 35.50 04 41 50.00 04 42 07.00 04 42 16.12	012 45 00 # 016 06 46 # 016 23 00 # 269 12 00 023 19 00 #	77 36 00 * 22 17 36 * 20 00 00 * 36 48 00 61 10 00 *	•
BTLSVL-A OKL DAYTON B O WHTIER A CAL PORTLANO ORE KURMEMACHI J	36 42 18 N 39 50 14 N 33 58 40 N 45 29 19 N 35 45 18 N	264 03 36 275 44 03 241 58 25 237 22 27 139 31 48	213 249 149 • 46 52	04 42 21.00 04 42 36.00 04 42 40.00 06 20 35.00 11 27 43.00	017 46 45 * 015 36 00 * 023 50 00 * 024 08 00 * 023 02 00 *	48 57 55 4 26 00 00 9 38 36 00 9 43 42 00 9 50 00 00 9	
ASAHIKAWA J L OPOPORA L AWAXIHASA L AWAXIHASA L AWAXIHASA	43 46 27 N 43 04 49 N 43 46 27 N 43 46 27 N 43 46 27 N	142 21 50 141 22 13 142 21 50 142 21 50 142 21 50	113 20 113 113 113	11 28 43.00 11 28 54.00 11 30 38.00 11 31 18.00 13 09 56.00	022 41 00 # 022 15 00 #	00 00 00	
ASAHIKAWA J SAPPORO J KYOTO J SAPPORO J KURMEMACHI J	43 46 27 N 43 04 49 N 35 01 01 N 43 04 49 N 35 45 18 N		113 20 55 20 52	13 10 45.00 13 11 47.00 13 12 25.00 13 12 29.00 13 31 17.00	016 26 00 * 013 00 00 017 07 00 *	21 00 00 42 00 00 13 00 00	•
BERLN SG GER BERLN SG GER BERLN SG GER BERLN SG GER JOKNN OB FIN	52 28 30 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 013 20 30	50 50 50 50 103	19 51 50 60 19 52 17 650 19 52 30 600 19 52 44 660 19 52 48 660	319 36 00 319 48 00 319 54 00	17 48 00 22 06 00 24 18 00 27 06 00 23 42 00	
BERLN SG GER JOKNN OB FIN BERLN SG GER JOKNN OB FIN BERLN SG GER	60 48 50 N 52 28 30 N 60 48 50 N	023 30 09 013 20 30 023 30 09	50 103	19 52 56.4( 19 52 58.00 19 53 05.30 19 53 09.80 19 53 14.44	270 12 00 320 42 00 267 12 00	29 36 00 24 48 00 31 48 00 26 12 00 33 48 00	

		LONGITUDE					
STATION		LONGITUDE	HEIGHT IN	TIME GMT IN	AZIMUTH OR	ELEVATI Y	
STATION	LATITUDE	EAST	METERS	HR MIN SEC	RGT ASCEN *	DECLINATI TAN	
			14 AUG 195	SE (CONT)			
JOKNN OB FIN	60 48 50 N	023 30 09	103	19 53 19•30	2// 20 00		
BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N	013 20 30 013 20 30	50 50	19 53 23.10	264 30 00 321 18 00	2 <b>7 1</b> 8 00 36 06 00	
JOKNN OB FIN BERLN SG GER	60 48 50 N 52 28 30 N	023 30 09	103	19 53 31.00 19 53 31.60	321 36 00 260 48 00	38 12 00 28 30 00	
JOKNN OB FIN	60 48 50 N		50	19 53 39.50	322 00 00	40 42 00	
BERLN SG GER JOKNN OB FIN	52 28 30 N	023 30 09 013 20 30	103 50	19 53 42.60 19 53 47.50	257 24 00 322 30 00	29 36 00	
BERLN SG GER	60 48 50 N 52 28 30 N	023 30 09 013 20 30	103 50	19 53 53.80 19 53 56.70	253 42 00 322 54 00	43 12 00 30 30 00	
JOKNN O8 FIN	60 48 50 N	023 30 09	103	19 54 05.80	249 30 00	46 12 00 31 24 00	
BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N	013 20 30 013 20 30	50 50	19 54 06.30 19 54 14.40	323 36 00	49 18 00	
JOKNN OB FIN 8ERLN SG GER	60 48 50 N 52 28 30 N	023 30 09 013 20 30	103 50	19 54 26.00	324 24 00 242 30 00	52 18 00 32 36 00	
8ERLN SG GER	52 28 30 N	013 20 30	50	19 54 29 10 19 54 38 30	325 48 00 327 12 00	58 06 00 61 48 00	
JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103	19 54 42.60	236 18 00	33 12 00	
BERLN SG GER BERLN SG GER	52 28 30 N 52 28 30 N	013 20 30	103 50	19 54 50.90 19 54 51.70	233 12 00 330 24 00	33 24 00 67 48 00	
JOKNN OB FIN	60 48 50 N	013 20 30 023 30 09	50 103	19 55 01.60 19 55 08.40	333 48 CO 226 54 OC	72 18 00 33 18 00	
BERLN SG GER GRONNGN NETH	52 28 30 N	013 20 30	50	19 55 10.30	338 30 00	76 06 00	
JOKNN OB FIN BERLN SG GER	53 12 18 N 60 48 50 N	006 34 01 023 30 09	103	19 55 13.90 19 55 20.40	020 59 54 *	49 30 00 #	
JOKNN OB FIN	52 28 30 N 60 48 50 N	013 20 30 023 30 09	50 103	19 55 29.50 19 55 32.70	348 00 00 218 24 00	33 06 00 79 <b>5</b> 4 00	
BERLN SG GER	52 28 30 N	013 20 30	50 .	19 55 34.00		32 42 00	
PIC MIDI FR JOKNN OB FIN	42 56 12 N 60 48 50 N	000 09 32	2862 103	19 55 40.00 19 55 45.80	032 00 00 038 36 00	84 42 0 <b>0</b> 20 <b>4</b> 2 00	
BERLN SG GER PIC MIDI FR	52 28 30 N 42 56 12 N	013 20 30 000 08 32	50	19 55 46.20	214 06 00 089 36 00	32 06 00 83 12 00	
JOKNN OB FIN	60 48 50 N	023 30 09	2862	19 55 53.00	042 00 00	20 48 00	
BERLN SG GER PIC MIOI FR	52 28 30 N 42 56 12 N	013 20 30 000 05 32	103 50	19 55 59.20 19 56 01.30	210 00 00 114 42 00	31 18 00 7; 24 00	
BERLN SG GER JOKNN OB FIN	52 28 30 N 60 48 50 N	013 20 30	2862 50	19 56 09.00 19 56 10.60	045 00 00 120 48 00	20 48 00 74 42 00	
BERLN SG GER		023 30 09	103	19 56 16.80	205 00 00	30 12 00	
PIC MIDI FR	52 28 30 N 42 56 12 N	013 20 30 000 08 32	50 2862	19 56 19.40 19 56 25.00	124 00 00 049 30 00	70 12 00	
BERLN SG GER JOKNN OB FIN	52 28 30 N 60 48 50 N	013 20 30 023 30 09	50 103	19 56 27.60 19 56 30.93	126 00 00	20 42 00 67 00 00	
BERLN SG GER	52 28 30 N	013 20 30	50	19 56 36.00	201 24 00 127 54 00	29 00 00 64 00 00	
JOKNN OB FIN BERLN SG GER	60 48 50 N 52 28 30 N	023 30 09 013 20 30	103 50	19 56 43.00 19 56 43.60	198 30 00	28 12 00	
PIC MIDI FR BERLN SG GER	42 56 12 N 52 28 30 N	000 C8 32 013 20 30	2862 50	19 56 46.00 19 56 53.40	128 54 00 054 12 00	61 12 00 20 24 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	19 56 54 6 6	013 00 00 196 06 00	57 48 00 27 18 00	
PIC MIDI FR ATHENS GR	42 56 12 N 37 58 19 N	000 08 32 023 43 01	2862	19 56 56 00	056 18 00	20 12 00	
BERLN SG GER JOKNN OB FIN	52 28 30 N 60 48 50 N	013 20 30	110 50	19 57 04.00 19 57 04.20	011 01 00 * 131 00 00	70 48 00 * 54 24 00	
PIC MIOI FR	42 56 12 N	023 30 09 000 08 32	103 2862	19 57 07.30 19 57 11.00	193 24 00 059 36 00	26 12 00 19 48 00	
BERLN SG GER JOKNN OB FIN	52 28 30 N	013 20 30	50	19 57 12.20	131 30 00		
BERLN SG GER	60 48 50 N 52 28 30 N	023 30 09 013 20 30	103 50	19 57 19.20 19 57 19.60	191 06 00 132 30 00	52 06 00 25 12 00	
PIC MIOT FR BERLN SG GER	42 56 12 N 52 28 30 N	000 08 32 013 20 30	2862 50	19 57 23.00 19 57 27.20	061 54 00 132 36 00	50 00 00 19 <b>24</b> 00	
PIC MIOI FR	42 56 12 N	000 08 32	2862	19 57 31.00		48 00 00	
ATHENS GR JOKNN OB FIN	37 58 19 N 60 48 50 N	023 43 01 023 30 09	110 103	19 57 31.00	063 30 00 011 36 00 #	19 12 00 76 36 00 #	
BERLN SG GER PIC MIDI FR	52 28 30 N 42 56 12 N	013 20 30 000 08 32	50	19 57 31.80 19 57 36.60	189 00 00 133 00 00	24 06 00 45 48 00	
BERLN SG GER	52 28 30 N	013 20 30	2862	19 57 41.00	065 24 00	18 48 00	
JOKNN OB FIN PIC MIDI FR	60 48 50 N 42 56 12 N	023 30 09	50 103	19 57 44.00 19 57 46.70	133 18 00 186 30 00	43 54 00 22 48 00	
BERLN SG GER PIC MIOI FR	52 28 30 N 42 56 12 N	000 08 32 013 20 30	2862 50	19 57 49.00 19 57 51.00	067 06 00 133 30 00	18 24 00 42 16 00	
BERLN SG GER		000 08 32	2862	19 57 58 50	068 42 00	18 06 00	
JOKNN OS FIN BERLN SG GER	52 28 30 N 60 48 50 N	013 20 30 023 30 09	50 103	19 57 59 10 19 58 04 70	133 54 00 184 00 00	40 42 00	
PIC MIOI FR	52 28 30 N 42 56 12 N	013 20 30 0 <b>0</b> 0 08 32	50 2862	19 58 07.40 19 58 10.50	134 00 00 070 48 00	21 30 00 39 00 00	
ATHENS GR	37 58 19 N	023 43 01	110	19 58 14.50	014 46 00 *	17 36 00 84 00 00 *	

SLANT RANGE IN KM

STAT	ION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR OECLINATION*	SLAN RANG IN K
				14 AUG 1958	(CONT)			
BERLN : JOKNN G PIC MI BERLN PIC MI	OB FIN OI FR SG GER	52 28 30 N 60 48 50 N 42 56 12 N 52 28 30 N 42 56 12 N	013 20 30 023 30 09 000 08 32 013 20 30 000 08 32	50 103 2862 50 2862	19 58 16.00 19 58 20.20 19 58 21.00 19 58 27.40 19 58 32.00	134 06 00 182 00 00 072 36 00 134 42 00 074 12 00	37 18 00 20 12 00 17 12 00 35 18 00 16 42 00	
BERLN PIC MI	OB FIN SG GER	37 58 19 N 60 48 50 N 52 28 30 N 42 56 12 N 52 28 30 N	023 43 01 023 30 09 013 20 30 000 08 32 013 20 30	110 103 50 2862 50	19 58 33.00 19 58 34.30 19 58 34.50 19 58 42.00 19 58 43.60	017 47 00 * 180 18 00 134 48 00 075 54 00 135 00 00	82 36 00 <b>*</b> 19 06 00 34 06 00 16 06 00 32 21 00	
PIC MI BERLN	SG GER SG GER	60 48 50 N 42 56 12 N 52 28 30 N 52 28 30 N 42 56 12 N	023 30 09 000 08 32 013 20 30 013 20 30 000 08 32	103 2862 50 50 2862	19 58 51.60 19 58 52.50 19 58 54.30 19 59 05.90 19 59 06.00	358 30 00 077 30 00 135 06 00 135 12 00 079 18 00	17 48 00 15 42 00 30 27 00 29 12 00 15 00 00	
PIC MI ATHENS	S GR SG GER	52 28 30 N 42 56 12 N 37 58 19 N 52 28 30 N 42 56 12 N	013 20 30 000 08 32 023 43 01 013 20 30 000 08 32	50 2862 110 50 2862	19 59 14.90 19 59 18.00 19 59 19.00 19 59 22.50 19 59 31.00	135 30 00 080 48 00 020 40 00 * 135 48 00 082 30 00	28 06 00 14 42 00 70 24 00 * 27 06 00 13 48 00	
ATHEN: BERLN PIC M	SG GER S GR SG GER IOI FR SG GER	52 28 30 N 37 58 19 N 52 28 30 N 42 56 12 N 52 28 30 N	013 20 30 023 43 01 013 20 30 000 08 32 013 20 30	50 110 50 2862 50	19 59 31.40 19 59 35.00 19 59 40.30 19 59 41.00 19 59 49.00	135 54 00 02C 40 0C * 135 54 00 083 54 00 136 00 00	25 54 0C 64 24 00 * 25 00 00 13 12 00 23 54 00	
ATHEN PIC M BERLN	IOI FR S GR IOI FR SG GER SG GER	42 56 12 N 37 58 19 N 42 56 12 N 52 28 30 N 52 28 30 N	000 08 32 023 43 01 000 08 32 013 20 30 013 20 30	. 2862 110 2862 50 50	19 59 51.50 19 59 52.00 19 59 59.50 20 00 01.30 20 00 09.70	085 06 00 020 52 00 * 085 54 00 136 00 00 136 06 00	12 54 00 59 12 00 # 12 24 00 22 42 00 21 48 00	
BERLI PIC M	S GR HOI FR N-SG GR HOI FR N-SG GR	37 58 19 N 42 56 12 N 52 28 30 N 42 56 12 N 52 28 30 N	023 43 01 000 08 32 013 20 30 000 08 32 013 20 30	110 2862 50 2862 50	20 00 10 50 20 00 11 00 20 00 17 20 20 00 20 50 20 00 26 30	021 02 00 * 087 00 00 136 06 00 088 30 00 136 06 00	53 48 00 <b>*</b> 11 54 00 20 54 00 11 18 00 20 06 00	
BERLI	1101 FR IN-SG GR 1101 FR	37 58 19 N 42 56 12 N 52 28 30 N 42 56 12 N 37 58 19 N	023 43 01 000 05 32 013 20 30 000 08 32 023 43 01	110 2862 50 2862 110	20 00 28.00 20 00 30.50 20 00 39.20 20 00 42.00 20 00 45.00	021 04 00 * 089 18 00 136 18 00 090 18 00 021 12 00 *	45 48 00 * 10 54 00 18 54 00 10 12 00 39 18 00 *	
BERL ATHE	IN-SG GR IN-SG GR NS GR IN-SG GR IN-SG GR	52 28 30 N 52 28 30 N 37 58 19 N 52 28 30 N 52 28 30 N	013 20 30 013 20 30 023 43 01 013 20 30 013 20 30	50 50 110 50 50	20 00 47.10 20 00 58.30 20 01 04.00 20 01 05.99 20 01 14.60	136 24 00 136 30 00 021 18 00 * 136 30 00 136 54 00	18 12 00 17 12 00 33 24 00 * 16 42 00 15 54 00	<u>J</u>
BERL ATHE ATHE	NS GR IN~SG GR NS GR NS GR NS GR	37 58 19 N 52 28 30 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 013 20 30 023 43 01 023 43 01 023 43 01	110 50 110 110 110	20 01 18.00 20 01 25.50 20 07 15.16 20 07 50.59 20 09 36.00	021 25 00 * 137 00 00 010 07 00 * 010 13 00 * 017 09 36 *	29 18 00 * 15 06 00 65 00 00 * 69 00 00 * 85 24 00 *	* *
ATHE ATHE ATHE	NS GR NS GR NS GR NS GR NS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	20 09 56.73 20 10 30.43 20 10 47.71 20 10 58.94 20 11 14.49	020 15 00 # 021 10 00 # 021 21 00 # 021 33 00 # 021 30 00 #	81 36 00 4 70 36 00 4 64 42 00 4 60 42 00 5 56 30 00	* *
ATHE GRON CAME	INS GR INS GR INGN NETH IR U ENG LMSFO ENG	37 58 19 N 37 58 19 N 53 12 18 N 52 12 51 N 51 43 00 N	006 34 01 000 05 41	110 110 28	20 11 34.36 20 11 59.42 21 38 43.20 21 39 17.60 21 39 19.00	265 06 00	51 24 00 41 36 00 24 54 00 47 48 00 24 00 00	*
CHE! BER! BER!	HMOND ENG LMSFO ENG LIN-SG GR LIN-SG GR LIN-SG GR	54 24 00 N 51 43 00 N 52 28 30 N 52 28 30 N 52 28 30 N	000 30 00 013 20 30 013 20 30	50 50	21 39 49.00 21 40 45.00 21 41 01.90 21 41 15.60 21 41 32.50	019 10 00 * 234 00 00 230 54 00	09 00 00 - 02 00 00 25 42 00 25 18 00 24 48 00	
BER BER CAM	HMONO ENG LN SG GER LN SG GER BR U ENG ERNNOO SP	54 24 00 N 52 28 30 N 52 28 30 N 52 12 51 N 36 27 42 N	013 20 30 013 20 30 000 05 41	50 50 28	21 41 35.00 21 42 20.00 21 42 33.70 21 43 19.10 21 43 22.36	217 36 00 215 06 00 168 42 00	22 54 00 22 12 00 23 12 00	

STATION	LATITUDE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			14 4115 1050	/cont)			•
MONTREAL CAN	45 31 10 N	286 22 21	14 AUG 1958	21 48 58•00	018 40 00 *	12 30 00 *	
MONTREAL CAN MONTREAL CAN	45 31 10 N 45 31 10 N	286 22 21 286 22 21	61 61	21 49 07:00 21 49 09:00	018 24 00 * 018 22 00 *	01 03 36 * 02 00 00 *	
			15 AUG 1958	l			
CARDO CAN CARDO CAN DUNLAP ONTAR CHI CPLN ILL OUNLAP ONTAR	46 47 10 N 46 47 10 N 43 51 46 N 41 51 58 N 43 51 46 N	288 43 45 288 43 45 280 34 40 272 23 35 280 34 40	91 91 244 194 244	01 00 41.23 01 03 42.90 02 44 51.00 02 45 41.60 02 47 21.00	023 59 00 * 022 37 00 * 013 38 00 * 023 04 00 * 019 45 42 *	59 30 00 * 29 30 G0 * 68 36 00 * 66 59 24 * 38 18 00 *	
PATERSON NJ BRISTOL TENN PATERSON NJ N CANTON A O DANVILLF ILL	40 54 00 N 36 25 03 N 40 54 00 N 40 55 54 N 40 08 57 N	285 51 00 277 50 31 285 51 00 278 32 40 272 22 26	30 527 30 366 189	02 47 31.00 02 47 57.00 02 48 11.00 02 48 28.00 02 48 35.00	017 30 00 # 022 21 00 # 018 30 00 # 021 16 00 # 087 00 00	51 00 00 # 58 00 00 # 37 00 00 # 29 36 00 # 36 36 00	
CHI FAXN ILL PATERSON NJ PORTLAND ORE ALMGRDO A NM ALMGROO A NM	41 59 00 N 40 54 00 N 45 29 19 N 32 52 23 N 32 52 23 N	272 21 00 285 51 00 237 22 27 254 02 57 254 02 57	218 30 46 1335 1335	02 49 39.00 02 49 56.00 04 25 14.50 04 27 18.00 04 27 35.00	022 08 00 * 019 40 00 * 002 00 00 * 008 45 00 * 008 34 00 *	14 00 00 * 10 00 00 * 76 24 00 * 73 06 00 * 75 24 00 *	
ORGN PASS NM EL PASO TFX ALBUO-GS NM OENVR A COLO OANVILLE ILL	32 25 24 N 31 49 41 N 35 06 22 N 39 44 57 N 40 08 57 N	253 26 51 253 36 36 253 23 14 255 03 24 272 22 26	1651 1565 1625 189	04 29 34.00 04 29 40.00 04 29 50.00 04 29 51.00 04 30 02.00	000 12 00 * 013 00 00 022 27 00 * 043 30 00 276 42 00	78 01 00 * 32 00 00 68 36 00 * 72 00 00 32 00 00	
BTLSVL-A OKL WICHITA KAN PORTLANO ORE WHTIER A CAL SAPPORO J	36 42 16 N 37 41 44 N 45 29 19 N 33 58 40 N 43 04 49 N	264 03 36 262 45 19 237 22 27 241 58 25 141 22 13	213 413 46 149 20	04 31 01.00 04 31 45.30 06 07 39.00 06 13 14.00 11 14 47.00	017 38 00 # 019 27 00 # 012 24 00 # 016 18 00 # 000 06 00 #	44 14 40 # 25 48 00 # 39 18 00 # 46 30 00 # 73 00 00 #	\ <del> </del>
KAGOSHIMA J SUWA J YOKKAICHI J KANYAMACHI J YOKKAICHI J	31 31 34 N 36 00 13 N 35 00 15 N 34 03 46 N 35 00 15 N	130 31 47 138 07 43 136 39 00 135 15 10 136 39 00	13 762 3 40 3	11 18 39.00 13 00 43.00 13 01 03.00 13 01 20.00 13 01 57.00	023 55 00 * 016 09 00 * 016 44 00 * 017 30 00 * 018 00 00 *	29 00 00 # 45 00 00 # 51 00 00 # 53 00 00 # 37 00 00 #	) )
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	19 41 34.30 19 41 45.70 19 41 55.90 19 42 06.50 19 42 20.60	260 24 00 257 18 00 254 00 00 250 30 00 245 42 00	27 54 00 28 54 00 29 42 00 30 30 00 31 18 00	
JOKNN 08 FIN JOKNN 09 FIN JOKNN 08 FIN JOKNN 08 FIN JOKNN 08 FIN	60 48 50 N 60 48 50 N 60 48 50 N 50 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	19 42 35.30 19 42 48.40 19 43 00.10 19 43 16.70 19 43 32.20	240 30 00 235 42 00 231 36 00 225 48 00 220 30 00	32 00 00 32 24 00 32 30 00 32 24 00 32 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN ATHENS GR	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 37 58 19 N	023 30 09 023 30 09 023 30 09 023 30 09 023 43 01	103 103 103 103 110	19 43 44.60 19 43 57.20 19 44 10.30 19 44 24.50 19 44 36.00	216 30 00 212 42 00 209 00 00 205 12 00 010 18 00	31 30 00 30 54 00 30 12 00 29 12 00 66 36 00	*
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN ATHENS GR JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 37 58 19 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 43 01 023 30 09	103 103 110	19 44 36.60 19 44 48.30 19 45 01.70 19 45 04.00 19 45 14.80	199 24 00 196 30 00 010 40 00	28 24 00 27 30 00 26 24 00 72 00 00 25 24 00	*
ATHENS GR JOKNN OB FIN ATHENS GR JOKNN OB FIN JOKNN OB FIN	37 58 19 N 60 48 50 N 37 58 19 N 60 48 50 N 60 48 50 N	023 43 01 023 30 09 023 43 01 023 30 09 023 30 09	103 110 103	19 45 24.00 19 45 30.30 19 45 47.00 19 45 52.00 19 46 06.20	191 06 00 012 50 00 187 36 00	24 06 00	
JOKNN OB FIN ATHENS GR JOKNN OB FIN JOKNN OB FIN ATHENS GR	60 48 50 N 37 58 19 N 60 48 50 N 60 48 50 N 37 58 19 N	023 30 09 023 43 01 023 30 09 023 30 09 023 43 01	110 103 103	19 46 19 30 19 46 23 00 19 46 38 40 19 46 52 010 19 46 58 00	015 15 00 181 24 00 180 00 00	18 42 00 17 48 00	
JOKNN OB FIN ATHENS GR JOKNN OB FIN ATHENS GR JOKNN OB FIN	60 48 50 N 37 58 19 N 60 48 50 N 37 58 19 N 60 48 50 N	023 30 09 023 43 01 023 30 09 023 43 01 023 30 09	110 9 103 1 110	19 47 09 80 19 47 25 00 19 47 25 40 19 47 45 00 19 47 47 30	019 53 00 176 54 00 020 19 00	15 30 00	

		*						
	STATION	LATITU0E	LONG! TUOE EAST	HEIGHT IN METERS	TIME GMT	AZ IMUTH OR	ELEVATION OR	SLANT RANGE
					HR MIN SEC	RGT ASCEN *	OECLINATION*	IN KM
				15 AUG 195	8 (CONT)			
J0 41 J0	HENS GR KNN OB FIN HENS GR KNN OB FIN KNN OB FIN	37 58 19 N 60 48 50 N 37 58 19 N 60 48 50 N 60 48 50 N	023 43 01 023 30 09 023 43 01 023 30 09 023 30 09	110 103 110 103 103	19 48 02.00 19 48 03.40 19 48 18.00 19 48 19.30 19 48 34.40	020 37 00 * 173 48 00 020 51 00 * 172 42 00 171 48 00	55 30 00 <b>*</b> 13 00 00 48 06 00 <b>*</b> 12 00 00 11 06 00	
AT JO AT	KNN OB FIN HENS GR KNN OH FIN HENS GR KNN OB FIN	60 48 50 N 37 58 19 N 60 48 50 N 37 58 19 N 60 48 50 N	023 30 09 023 43 01 023 30 09 023 43 01 023 30 09	103 110 103 110	19 48 48.80 19 48 53.00 19 49 02.10 19 49 13.00 19 49 14.50	170 54 00 021 00 00 * 170 06 00 021 03 00 * 169 30 00	10 12 00 39 00 00 * 09 30 00 32 00 00 * 08 48 00	
10 00	HENS GR KNN OB FIN KNN OB FIN KNN OB FIN HENS GR	37 58 19 N 60 48 50 N 60 48 50 N 60 48 50 N 37 58 19 N	023 43 01 023 30 09 023 30 09 023 30 09 023 43 01	110 103 103 103 110	19 49 29.00 19 49 31.10 19 49 44.60 19 49 56.70 19 49 57.00	021 09 00 * 168 36 00 168 00 00 167 30 00 021 27 00 *	28 12 00 * 07 54 00 07 06 00 06 36 00 19 48 00 *	
MI CA	MBR U ENG MBR U ENG LLHILL ENG MBR U ENG LLHILL ENG	52 12 51 N 52 12 51 N 51 37 00 N 52 12 51 N 51 37 00 N	000 05 41 000 05 41 359 46 00 000 05 41 359 46 00	2 8 2 3 2 8	21 24 26 10 21 25 36 20 21 26 21 40 21 26 2? 50 21 26 30 80	294 06 00 279 24 00 015 14 00 # 260 48 00 015 28 30 #	29 12 00 39 54 00 35 36 00 * 47 18 00 34 24 00 *	
MI MI	LLHILL ENG LLHILL ENG LLHILL ENG LLHILL ENG MBR U ENG	51 37 00 N 51 37 00 N 51 37 00 N 51 37 00 N 51 37 00 N 52 12 51 N	359 46 00 359 46 00 359 46 00 359 46 00 000 05 41	28	21 26 39.30 21 26 48.20 21 26 57.40 21 27 06.40 21 27 13.60	015 42 00 # 015 56 30 # 016 10 00 # 016 22 30 # 233 18 00	33 06 00 # 31 42 00 # 30 18 00 # 28 48 0C # 50 30 00	
MI MI MI	MBR U ENG	52 12 51 N 51 37 00 N 51 37 00 N 51 37 00 N 51 37 00 N	000 05 41 359 46 00 359 46 00 359 46 00 359 46 00	2 8	21 27 56.30 21 28 17.00 21 28 25.00 21 28 35.10 21 28 43.60	211 24 00 017 52 00 * 018 00 00 * 018 08 00 * 018 15 00 *	48 06 00 14 12 00 * 12 24 00 * 10 36 00 * 08 48 00 *	
MI CA S	AMBR U ENG LLHILL ENG AMER U ENG FERNNDO SP ARNHAM ENG	52 12 51 N 51 37 00 N 52 12 51 N 36 27 42 N 51 12 00 N	000 05 41 359 46 00 000 05 41 353 47 42 359 12 00	28 25 30	21 28 44.30 21 28 51.90 21 29 24.90 21 29 44.40 21 29 45.00	194 06 00 018 25 00 * 184 24 00 022 27 24 * 019 09 00 *	41 48 00 07 06 00 * 36 05 00 58 42 00 * - 02 30 00 *	
CA CA MO	AMBR U ENG AMBR U ENG AMBR U ENG DNTREAL CAN DNTREAL CAN	52 12 51 N 52 12 51 N 52 12 51 N 52 12 51 N 45 31 10 N 45 31 10 N	000 05 41 000 05 41 000 05 41 286 22 21 286 22 21	28 28 61 61	21 30 13.40 21 30 59.20 21 31 49.30 21 32 48.00 21 32 59.25	176 54 00 172 06 00 168 24 00 013 58 00 # 014 12 21 #	29 48 00 24 54 00 20 06 00 46 30 00 * 45 06 00 *	
MO MO	ONTREAL CAN AMBR U ENG ONTREAL CAN ONTREAL CAN ONTREAL CAN	45 31 10 N 52 12 51 N 45 31 10 N 45 31 10 N 45 31 10 N	286 22 21 000 05 41 286 22 21 286 22 21 286 22 21	61 28 61 61 61	21 33 46.60 21 34 34.60 21 34 40.20 21 34 49.00 21 35 47.20	015 35 00 # 283 24 00 016 50 00 # 016 55 00 # 017 25 00 #	42 30 00 * 55 12 00 32 03 00 * 31 00 00 * 20 26 00 *	
M	ONTREAL CAN	45 31 10 N	286 22 21	61 16 AUG 195	21 36 45•12	018 54 00 *	04 00 00 #	
.,				10 A00 195				
М М М	IL RAO MASS IL RAO MASS IL RAO MASS IL RAO MASS UNLAP ONTAR	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 43 51 46 N	288 30 28 288 30 28 288 30 28 288 30 28 289 34 40	155 155 155 155 244	00 48 19.00 00 51 44.00 00 54 21.00 02 31 13.00 02 31 42.50	007 24 00 062 42 00 093 42 00 318 00 00 011 41 00 *	20 42 00 28 54 00 20 00 00 14 24 00 60 00 00 *	1668 2233 2177
A I	MES A IOWA MES IOWA MES A IOWA AYTON B O AYTON B O	42 01 59 N 42 01 43 N 42 01 59 N 39 50 14 N 39 50 14 N	266 22 00 266 20 59 266 22 00 275 44 03 275 44 03	305 305 249 <b>24</b> 9	02 32 32.00 02 32 43.00 02 33 12.00 02 33 17.00 02 33 37.00	032 30 00 000 16 13 * 044 30 00 019 20 00 * 022 45 00 *	33 00 00 61 37 26 * 34 30 00 88 30 00 * 83 00 00 *	
. A	AROC CAN MES IOWA K CY A OKLA MES A IOWA AYTON B O	46 47 10 N 42 01 43 N 35 33 50 N 42 01 59 N 39 50 14 N	288 43 45 266 20 59 262 29 20 266 22 00 275 44 03	91 360 305 <b>24</b> 9	02 33 37.70 02 34 04.00 02 34 05.00 02 34 23.00 02 34 31.00	015 14 00 # 023 05 26 # 000 27 00 # 066 30 00 014 58 00 #	33 30 00 # 42 10 19 # 46 20 00 # 34 00 00 59 00 00 #	,
C D A	AROC CAN AROC CAN AYTON B O MES A IOWA CANTON A O	46 47 10 N 46 47 10 N 39 50 14 N 42 01 59 N 40 55 54 N	288 43 45 288 43 45 275 44 03 266 22 00 278 32 40	91 91 249 305 366	02 34 31.00 02 34 37.70 02 35 02.00 02 35 07.00 02 35 33.00	015 35 00 * 015 14 00 * 046 05 00 078 30 00 020 40 00 *	23 18 00 # 33 24 00 # 54 16 00 31 00 00 45 08 00 #	
	AROC CAN IL RAO MASS	46 47 10 N 42 37 03 N	288 43 45 288 30 28	91 155	02 35 35•30 02 35 56•00	017 33 00 # 250 00 00	12 36 00 * 61 00 00	1167

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION	SLANT RANGE IN KM
			16 AUG 1958	(CONT)			
AMES A IOWA OAYTON B O AMES A IOWA AMES A IOWA BRISTOL TENN	42 01 59 N 39 50 14 N 42 01 59 N 42 01 59 N 42 01 59 N 36 35 03 N	266 22 00 275 44 03 266 22 00 266 22 00 277 50 31	305 249 305 305 527	02 36 09.00 02 36 27.00 02 36 53.00 02 37 29.00 02 37 35.00	091 30 00 021 46 00 * 098 30 00 102 30 00 090 00 00	26 00 00 28 45 00 * 22 30 00 20 00 00 48 15 00	
MIL RAD MASS ALMGROO A NM AMES A IOWA ALMGROO A NM AMES A IOWA	42 37 03 N 32 52 23 N 42 01 59 N 32 52 23 N 42 01 59 N	288 30 28 254 02 57 266 22 00 254 02 57 266 22 00	155 1335 305 1335 305	02 41 48.00 04 15 42.00 04 15 46.00 04 16 00.00 04 16 31.00	167 24 00 008 46 00 * 309 30 00 008 30 00 * 290 30 00	19 00 00 75 48 00 * 30 18 00 73 18 00 * 37 00 00	2580
OAYTON R O AMES A IOWA OAYTON R O OENVR A COLO AMES A IOWA	39 50 14 N 42 01 59 N 39 50 14 N 39 44 52 N 42 01 59 N	275 44 03 266 22 00 275 44 03 255 03 24 266 22 00	249 305 249 1625 305	04 17 12:00 04 17 15:00 04 17 35:00 04 17 42:60 04 17 59:00	014 41 00 * 276 30 00 282 15 00 044 45 00 26° 30 00	25 50 00 * 43 30 00 22 51 00 78 30 00 49 00 00	
OAYTON B O ALMGROO A NM OAYTON B O AMES A IOWA OAYTON B O	39 50 14 N 32 52 23 N 39 50 14 N 42 01 59 N 39 50 14 N	275 44 03 254 02 57 275 44 03 266 22 00 275 44 03	249 1335 249 305 249	04 18 25.00 04 13 28.00 04 18 42.00 04 18 44.00 04 18 53.00	015 39 00 * 022 19 00 * 013 45 00 * 238 30 00 015 52 00 *	19 30 00 # 67 30 00 # 17 00 00 # 50 00 00 15 10 00 #	
LAWTON OKLA AMRLLO B TEX AMES A !OWA MEMPHIS TENN ASAHIKAWA J	34 39 44 N 35 12 06 N 42 01 59 N 35 09 26 N 43 46 27 N	261 35 47 258 06 29 266 22 00 270 08 46 142 21 50	35 P 1130 305 85 113	04 19 01.00 04 19 11.50 04 19 46.00 04 20 00.00 11 03 18.00	335 CO 00 020 12 00 * 211 30 00 270 00 00 022 12 00 *	68 54 00 46 42 00 * 46 30 00 49 30 00 58 00 00 *	
U AMYSTMACH SAPPORO J SENDAI J SENDAICHI J HOSHMTSYMA J	36 02 22 N 43 04 49 N 38 15 22 N 35 00 15 N 36 02 22 N	139 23 54 141 22 13 140 51 56 136 39 00 139 23 54	31 20 45 3	11 03 55.00 11 04 04.00 11 04 05.00 11 04 18.00 11 05 05.00	000 28 00 # 077 41 00 # 042 06 00 000 06 00 # 023 37 00 #	57 00 00 * 40 00 00 * 34 30 00 49 00 00 * 43 00 00 *	
AAGU OYXOT L AMIHROGAX L AMIHROGAX L AWAXIHAZA L AMIHROGAX	35 40 11 N 31 31 34 N 31 31 34 N 43 46 27 N 31 31 34 N	139 32 26 130 31 47 130 31 47 142 21 50 130 31 47	58 13 13 113	11 05 24.99 11 06 17.00 12 45 40.00 12 46 22.00 12 46 38.00	023 25 36 * 023 46 00 * 010 56 00 * 014 57 00 * 012 04 00 *	40 08 00 * 29 00 00 * 70 00 00 * 23 00 00 * 77 00 00 *	
MITAKA J KANYAMACHI J KONKO J MIYAZAKI J TAKAOA J	35 40 20 N 34 03 46 N 34 32 31 N 31 55 23 N 37 06 38 N	139 32 30 135 15 10 133 37 40 131 25 24 136 15 22	50 40 4 8 23	12 46 51•10 12 48 09•00 12 48 26•00 12 48 28•50 12 48 43•00	310 42 00 016 00 00 * 016 10 00 * 018 22 00 * 016 40 00 *	28 19 00 59 00 00 * 66 00 00 * 71 00 00 * 34 00 00 *	
SEÑOAI J MIZUKAIOO J YOKKAICHI J MITAKA J OITA J	38 15 22 N 36 00 56 N 35 00 15 N 35 40 20 N 33 36 06 N	140 51 56 139 59 18 136 39 00 139 32 30 131 11 57	45 12 3 50 4	12 49 13.00 12 49 13.00 12 49 26.00 12 49 29.40 12 49 38.00	257 00 00 270 00 00 017 40 00 * 271 12 00 019 55 00 *	48 00 00 51 00 00 37 00 00 * 54 48 00 43 00 00 *	
YOKKAICHI J MITAKA J YATSUSHIRO J COPNGN 8 OEN ATHENS GR	35 00 15 N 35 40 20 N 32 30 21 N 55 42 13 N 37 58 19 N	136 39 00 139 32 30 130 36 15 012 27 09 023 43 01	50 3 10 110	12 49 47.00 12 49 56.60 12 50 03.00 19 31 22.30 19 31 51.00	018 10 00 * 256 54 00 043 00 00 337 48 00 010 29 00 *	57 18 00 72 00 00 55 42 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	19 32 18.00 19 32 36.00 19 33 15.00 19 34 05.00 19 34 23.00	010 49 00 * 011 23 00 * 012 24 00 * 017 06 00 * 018 37 00 *	74 12 00 1 78 24 00 1 79 42 00 1	• •
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	19 35 16.00 19 35 35.00 19 36 01.00 19 36 19.00 19 36 20.00	019 45 00 4 020 11 00 4 020 28 00 4 020 30 00 4 020 36 00 4	51 48 00 9 42 06 00 9 36 00 00	# 16- #-
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	19 36 37.00 19 36 48.00 19 37 04.00 19 37 35.00 19 37 40.00	020 42 00 0 020 56 00 0 021 17 00	27 00 00 24 06 00 13 00 00	* *
GRONNGN NETH HORSBROG ENG Croyoon Eng Cambr u Eng Gronngn Neth	51 18 00 N 52 12 51 N	006 34 01 000 15 00 359 53 00 000 05 41 006 34 01	28	21 13 08.60 21 13 43.00 21 14 31.50 21 14 34.70 21 15 18.20	267 00 00 017 05 00 231 18 00	# 12 00 00 49 12 00	*

STATION	LONGITUDE EAST	HEIGHT TIME GMT IN METERS HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
		16 AUG 1958 (CONT)			
HANOVR C GER CROYOON ENG VLAROGN NETH HORSBROG ENG HORSBROG ENG	52 23 58 N 009 43 14 51 18 00 N 359 53 00 51 54 49 N 004 18 59 50 53 00 N 000 15 00 50 53 00 N 000 15 00	21 15 18.20 21 15 20.50 21 15 31.40 21 15 48.00 21 17 34.00	016 06 30 * 017 31 00 * 016 56 48 * 203 00 00 176 00 00	17 12 00 * 18 30 00 * 49 35 00 * 49 00 00 33 00 00	
CROYDON ENG	51 18 00 N 359 53 00	21 19 24.90	019 01 00 *	- 05 30 00 *	
		17 AUG 1958		33 30 00 1	
AMES A IOWA AMES A IOWA AMES A IOWA DUNLAP ONTAR AMES A IOWA	42 01 59 N 266 22 00 42 01 59 N 266 22 00 42 01 59 N 266 22 00 43 51 46 N 280 34 40 42 01 59 N 266 22 00	305 00 40 53.60 305 02 17 34.00 305 02 18 01.00 244 02 18 19.80 305 02 18 36.00	244 00 00 358 00 00 004 00 00 014 43 00 * 012 00 00	49 00 00 21 00 00 24 30 00 66 18 00 *	
AMES A IOWA AMES A IOWA AMES A IOWA OAYTON B O AMES IOWA	42 01 59 N 266 22 00 42 01 59 N 266 22 00 42 01 59 N 266 22 00 39 50 14 N 275 44 03 42 01 43 N 266 20 59	305 02 19 12.00 305 02 19 41.00 305 02 20 17.00 249 02 20 23.00 02 20 32.00	021 30 00 031 00 00 043 00 00 000 30 00 * 023 15 08 *	32 18 00 34 18 00 36 30 00 88 05 00 * 52 07 11 *	
MIL RAO MASS AMES A IOWA OAYTON 8 O AMES A IOWA AMES IOWA	42 37 03 N 288 30 28 42 01 59 N 266 22 00 39 50 14 N 275 44 03 42 01 59 N 266 22 00 42 01 43 N 266 20 59	155	305 24 00 052 00 00 015 15 00 061 00 00 022 48 16 *	34 16 00 36 30 00 48 32 00 36 12 00 40 58 18 *	
OAYTON B O CAROC CAN CHI CPLN ILL AMES A IOWA PITTSBGH PA	39 50 14 N 275 44 03 46 47 10 N 288 43 45 41 51 56 N 272 23 35 42 01 59 N 266 22 00 40 29 00 N 280 00 00	305 02 21 36.00	021 43 00 # 015 27 00 # 021 57 00 # 069 00 00 000 00 00	70 15 00 * 29 48 00 * 52 48 18 * 34 48 00 66 15 00	
CAROC CAN AMES A IOWA AMES A IOWA N CANTON C O AMES A IOWA	46 47 10 N 288 43 45 42 01 59 N 266 22 00 42 01 59 N 266 22 00 40 52 35 N 278 35 20 42 01 59 N 266 22 00	305 02 22 30 00 02 23 02 00	016 28 00 # 077 30 00 083 30 00 020 28 30 # 091 00 00	21 24 00 * 33 12 00 30 42 00 36 36 00 * 28 00 00	,
BRYN ATHN PA MIL RAO MASS N CANTON A O CARDC CAN TERRHAUT INO	40 08 00 N 284 56 00 42 37 03 N 288 30 28 40 55 54 N 278 32 40 46 47 10 N 288 43 45 39 31 38 N 272 36 10	155 02 23 20.00 366 02 23 30.00 91 02 23 30.40	018 30 00 # 234 36 00 020 28 30 # 017 58 00 # 090 00 00	36 00 00 * 59 24 00 36 36 00 * 02 54 00 * 42 28 00	
AMES A IOWA DAYTON 8 O AMES A IOWA AMES A IOWA MIL RAO MASS	42 01 59 N 266 22 00 39 50 14 N 275 44 03 42 01 59 N 266 22 00 42 01 59 N 266 22 00 42 37 03 N 288 30 28	249 02 24 08 00 305 02 24 18 00 305 02 24 53 60	096 30 00 ** 101 30 00 ** 105 30 00 178 42 00	24 48 00	
MIL RAO MASS CHI FAXN ILL AMES A IOWA AMES A IOWA AMES A IOWA	42 37 03 N 288 30 28 41 59 00 N 272 21 00 42 01 59 N 266 22 00 42 01 59 N 266 22 00 42 01 59 N 266 22 00	218	168 48 00 270 00 00 309 30 00 305 00 00 300 30 00	18 36 00 29 00 00 18 12 00 23 06 00 28 00 00	
PORTLANO ORE AMES A IOWA AMES A IOWA AMES IOWA AMES A IOWA	45 29 19 N 237 22 27 42 01 59 N 266 22 00 42 01 59 N 266 22 00 42 01 43 N 266 20 59 42 01 59 N 266 22 00	305 04 03 04.00 305 04 03 51.00 04 04 16.00	022 25 00 * 300 48 00 285 00 00 015 31 35 * 267 30 00	31 36 00 * 31 36 00 38 54 00 31 42 59 * 45 30 00	
LAWTON OKLA CHI FAXN ILL AMES A IOWA CHI CPLN ILL AMES IOWA	34 39 44 N 261 35 47 41 59 00 N 272 21 00 42 01 59 N 265 22 00 41 51 58 N 272 23 35 42 01 43 N 266 20 59	218 04 04 50.00 305 04 05 10.00 194 04 05 11.50	331 C1 00 270 00 00 256 00 00 015 43 18 * 016 39 26 *	43 38 00 29 00 00 48 12 00 17 35 00 * 20 57 01 *	
AMES IOWA OAYTON 8 O ALMGROO A NM AMES A IOWA ORGN PASS NM	42 01 43 N 266 20 55 39 50 14 N 275 44 03 32 52 23 N 254 02 57 42 01 59 N 266 22 50 42 02 52 4 N 253 26 51	249 04 05 57.00 1335 04 06 10.00 305 04 06 12.00	017 11 54 * C15 42 00 * 021 48 50 * 228 30 00 C21 58 24 *	14 01 23 * 15 01 00 * 52 42 00 * 47 54 00 46 01 00 *	
ORGN PASS NM ORGN PASS NM AMES A IOWA AMES A IOWA WICHITA KAN	32 25 24 N 253 26 51 32 25 24 N 253 26 51 42 01 59 N 266 22 00 42 01 59 N 266 22 00 37 41 44 N 262 45 19	1651 04 06 40•77 1651 04 06 48•78 305 04 06 50•00 305 04 07 34•00	021 57 36 * 021 56 48 * 214 30 00 204 00 00 019 13 00 *	43 40 00 * 41 21 00 * 44 46 00 41 00 00	
ASAHIKAWA J KAGOSHIMA J	43 46 27 N 142 21 50 31 31 34 N 130 31 47	113 10 51 47.00	021 07 00 * 023 10 00 *	07 06 00 * 27 00 00 * 12 00 00 *	

STATION .	LATITUOE	LONG I TUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			17 AUG 1958	(CONT)			
KAGOSHIMA J YAMAGATA J YATSUSHIRO J YOKKAICHI J YATSUSHIRO J	31 31 34 N 38 15 16 N 32 30 21 N 35 00 15 N 32 30 21 N	130 31 47 140 20 59 130 26 15 136 39 00 130 36 15	13 151 3 3	12 35 13.00 12 35 27.00 12 35 50.00 12 36 02.00 12 36 21.00	018 39 00 * 270 00 00 018 00 00 * 016 48 00 * 297 00 00	74 00 00 * 45 00 00 * 46 00 00 * 43 00 00 * 80 00 00	
YOKKAICHI J KANYAMACHI J YATSUSHIRO J SHIRAZ IRAN SHIRAZ IRAN	35 00 15 N 34 03 46 N 32 30 21 N 29 38 40 N 29 38 40 N	136 39 00 135 15 10 130 36 15 052 31 33 052 31 33	3 40 3 1600 1600	12 36 30.00 12 36 40.00 12 37 37.00 17 40 42.52 17 41 07.69	017 26 00 # 018 15 00 # 060 00 00 019 07 00 # 019 55 48 #	35 00 00 * 36 00 00 * 75 00 00 80 48 00 * 75 25 00 *	
SHIRAZ IRAN ATHENS GR ATHENS GR ATHENS GR ATHENS GR	29 38 40 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	052 31 33 023 43 01 023 43 01 023 43 01 023 43 01	1600 110 110 110 110	17 41 58.00 19 17 37.50 19 18 04.50 19 18 57.50 19 19 05.00	020 35 48 * 009 54 00 * 010 16 00 * 010 45 00 * 010 58 00 *	62 13 00 * 60 12 00 * 64 42 00 * 67 42 00 * 72 00 00 *	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	19 19 16.00 19 19 33.50 19 19 51.00 19 20 13.00 19 20 17.00	011 14 00 # 011 54 00 # 013 08 00 # 015 03 00 # 015 00 00 #	73 06 00 * 76 00 00 * 78 00 00 * 81 00 00 * 79 18 00 *	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	19 20 54.50 19 21 01.00 19 21 10.00 19 21 19.00 19 21 22.50	017 57 00 * 018 23 00 * 018 48 00 * 019 03 00 * 018 59 00 *	74 06 00 # 72 20 00 # 69 00 00 # 67 00 00 # 67 12 00 #	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	19 22 22.00 19 22 25.00 19 22 37.00 19 22 41.50 19 22 49.50	020 04 00 # 020 03 00 # 020 10 00 # 020 15 00 # 020 24 00 #	46 30 00 * 45 00 00 * 42 00 00 * 40 00 00 * 33 42 00 *	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	19 23 17.00 19 23 59.00 19 24 00.00 19 24 00.50 19 24 19.50	020 30 00 * 020 39 00 * 020 40 00 * 020 41 00 * 020 44 00 *	29 00 00 * 15 30 00 * 15 54 00 * 15 54 00 * 10 36 00 *	
ATHENS GR ATHENS GR HERSTMCX ENG HORSBROG ENG GRONNGN NETH	37 58 19 N 37 58 19 N 50 52 01 N 50 53 00 N 53 12 18 N	023 43 01 023 43 01 000 20 16 000 15 00 006 34 01	110 110 32	19 24 46.50 19 25 07.50 20 58 47.00 20 58 50.00 20 59 46.10	020 54 00 # 020 59 00 # 295 00 00 294 00 00 014 20 00 #	02 24 00 * - 02 00 00 * 30 00 00 31 00 00 21 30 00 *	
HERSTMCX ENG MILLHILL ENG RICHMONO ENG MILLHILL ENG HORSBROG ENG	50 52 01 N 51 37 00 N 54 24 00 N 51 37 00 N 50 53 00 N	000 20 16 359 46 00 358 18 00 359 46 00 000 15 00	32	20 59 52.00 20 59 53.80 21 00 20.00 21 00 20.50 21 01 22.00	280 00 00 015 00 00 # 016 21 00 # 015 39 00 # 235 00 00	44 00 00 33 24 00 * 19 30 00 * 29 24 00 * 52 00 00	
MILLHILL ENG CROYOON ENG RICHMONO ENG HILVRSM NETH VLAROGN NETH	51 37 00 N 51 18 00 N 54 24 00 N 52 12 23 N 51 54 49 N	359 46 00 359 53 00 358 18 00 005 10 05 004 18 59		21 01 58.40 21 02 01.00 21 02 03.00 21 02 07.30 21 02 09.40	018 28 00 * 017 27 00 * 018 01 00 * 015 45 54 * 016 50 30 *	12 06 00 * 13 00 00 * 02 00 00 * 07 00 00 * 08 06 00 *	
HORSBROG ENG MILLHILL ENG HERSTMCX ENG CROYOON ENG GRONNGN NETH	50 53 00 N 51 37 00 N 50 52 01 N 51 18 00 N 53 12 18 N	000 15 00 359 46 00 000 20 16 359 53 00 006 34 01	32	21 02 14.00 21 02 33.80 21 03 27.00 21 03 46.50 21 04 01.30	204 00 00 017 59 00 * 184 00 00 018 43 00 * 018 00 00 *	43 00 00 05 74 00 * 37 00 00 ~ 04 30 00 * ~ 10 00 00 *	
HERSTMCX ENG HORSBROG ENG	50 52 01 N 50 53 00 N	000 20 16 000 15 00	32	21 05 50.00 21 06 35.00	168 <b>0</b> 0 00 166 0 <b>0</b> 00	22 00 00 18 00 00	
AMES A IOWA TOKYO JAPAN AMES A IOWA AMES A IOWA OAYTON 8 O	42 01 59 N 35 40 11 N 42 01 59 N 42 01 59 N 39 50 14 N	266 22 00 139 32 28 266 22 00 266 22 00 275 44 03	305 58 305 305 305 249	02 04 52*00 02 04 59*52 02 05 36*00 02 06 12*00 02 06 34*50	011 12 00 021 38 18 * 022 42 00 034 42 00 008 00 00 *	31 24 00 34 12 00	
AMES A IOWA PATERSON NJ DAYTON B O AMES IOWA AMES IOWA	42 01 59 N 40 54 00 N 39 50 14 N 42 01 49 N 42 01 49 N	266 22 00 285 51 00 275 44 03 266 20 59 266 20 59	305 30 249	02 06 57.02 02 07 06.00 02 07 20.00 02 07 22.00 02 07 40.00	049 42 00 013 27 00 + 011 18 00 022 42 08 4 022 33 29 4	41 24 00 44 37 01	*
AMES A IOWA	42 01 59 N	266 22 00	305	02 07 41.08	064 42 00	35 12 00	

STATION	LATITU0E	LONGITUDE EAST	HEIGHT . IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION SOME PROPERTY OF THE
			18 AUG 19	58 (CONT)		
CHI CPLN ILL OAYTON 8 O OAYTON B O PITTS8GH PA AMES A IOWA	41 51 58 N 39 50 14 N 39 50 14 N 40 29 00 N 42 01 59 N	272 23 35 275 44 03 275 44 03 280 00 00 266 22 00	194 249 249 381 305	02 07 42.80 02 07 45.00 02 08 08.00 02 08 15.00 02 08 17.37	021 41 24 * 021 10 00 * 021 10 00 * 00 00 00 00 077 42 00	54 20 00 * 70 30 00 * 62 15 00 * 68 34 00 32 18 00
OUNLAP ONTAR CHI FAXN ILL AMES A IOWA OAYTON B O N CANTON A O	43 51 46 N 41 59 00 N 42 01 59 N 39 50 14 N 40 55 54 N	280 34 40 272 21 00 266 22 00 275 44 03 278 32 40	244 218 305 249 366	02 08 34 • 20 02 09 09 • 00 02 09 12 • 00 02 09 19 • 50 02 09 21 • 50	019 39 00 * 090 00 00 088 42 00 021 15 00 * 020 15 50 *	36 54 00 * 52 30 00 28 18 00 38 15 00 * 36 52 00 *
ARLINGTON VA ARLINGTON VA TERRHAUT INO AMES A IOWA GRNSBRO A NC	38 50 48 N 38 50 48 N 39 31 38 N 42 01 59 N 36 04 38 N	282 53 35 282 53 35 272 36 10 266 22 00 280 07 57	59 59 155 305 265	02 09 22.00 02 09 22.17 02 09 45.00 02 09 56.00 02 10 25.00	000 00 00 000 00 00 090 00 00 096 12 00 020 52 00 *	79 00 00 84 00 00 45 28 00 24 24 00 44 00 00 #
BRYN ATHN PA AMES A IOWA CLEVELNO A O WPALMB A FLA OAYTON B O	40 08 00 N 42 01 59 N 41 29 46 N 26 39 30 N 39 50 14 N	284 56 00 266 22 00 278 12 16 279 55 20 275 44 03	85 305 220 5 249	02 10 31.00 02 10 49.00 02 11 26.00 02 12 26.00 02 12 40.00	180 00 00 103 12 00 129 42 00 053 00 00 021 28 00 *	70 00 00 21 12 00 39 42 00 40 00 00 - 05 20 00 *
AMES A IOWA AMES A IOWA AMES A IOWA ALMGOO-GS:NM ALMGOO-GS:NM	42 01 59 N 42 01 59 N 42 01 59 N 32 52 22 N 32 52 22 N	266 22 00 266 22 00 266 22 00 254 03 05 254 03 05	305 305 305 1339 1339	03 46 25.00 03 46 49.00 03 48 04.00 03 50 09.00 03 50 27.00	292 12 00 256 12 00 168 12 00 002 00 00 # 022 37 00 #	73 18 00 81 00 00 66 12 00 88 30 00 # 85 24 00 #
ALMGOO-GS&NM AMES IOWA OENVR A COLO CHI FAXN ILL CHI CPLN ILL	32 52 22 N 42 01 43 N 39 44 52 N 41 59 00 N 41 51 58 N	254 03 05 266 20 59 255 03 24 272 21 00 272 23 35	1339 1625 218 194	03 50 31.77 03 50 54.00 03 51 03.60 03 51 07.00 03 51 27.20	021 33 00 * 015 46 06 * 042 30 00 270 00 00 015 31 30 *	51 12 00 <b>*</b> 27 34 25 <b>*</b> 77 30 00 37 30 00 17 16 36 <b>*</b>
KANCITY MO ALMGDO-GS⊕NM OANVILLE ILL WICHITA KAN SUNYVALE CAL	39 02 02 N 32 52 22 N 40 08 57 N 37 41 44 N 37 21 00 N	265 25 03 254 03 05 272 22 26 262 45 19 237 56 24	259 1339 189 413 61	03 51 51.00 03 52 32.00 03 53 03.00 03 54 19.90 05 34 43.80	270 00 00 021 33 00 * 246 00 00 019 09 24 * 017 44 48 *	54 30 00 51 12 00 * 36 00 00 03 12 00 * 27 48 00 *
ALMGOO-GS.NM ALMGDO-GS.NM PORTLANO ORE MITAKA J MITAKA J	32 52 22 N 32 52 22 N 45 29 19 N 35 40 20 N 35 40 20 N	254 03 05 254 03 05 237 22 27 139 32 30 139 32 30	1339 1339 46 50	05 35 22.00 05 35 48.00 05 36 00.00 10 36 37.80 10 37 08.90	015 17 00 * 015 30 00 * 019 01 00 * 028 06 00 040 30 00	20 24 00 * 17 00 00 * 15 30 00 * 24 49 00 27 24 00
TOKYO JAPAN SENOAI J MIZUKAIOO J MITAKA J MIYAZAKI J	35 40 11 N 38 15 22 N 36 00 56 N 35 40 20 N 31 55 23 N	139 32 28 140 51 56 139 59 16 139 32 30 131 25 24	58 45 12 50 8	10 37 26.68 10 37 32.00 10 38 40.00 10 38 47.00 12 20 41.00	023 25 18 * 022 45 00 * 045 00 00 065 24 00 016 09 00 *	50 45 00 <b>*</b> 47 00 00 <b>*</b> 31 00 00 28 12 00 75 00 00 <b>*</b>
KAGOSHIMA J SENOAI J HGSHMTSYMA J KONKO J SUWA J	31 31 34 N 38 15 22 N 36 02 22 N 34 32 31 N 36 00 13 N	130 31 47 140 51 56 139 23 54 133 37 40 138 07 43	13 45 31 4 762	12 21 14.00 12 23 12.00 12 23 15.00 12 23 17.00 12 23 35.00	018 23 00 * 017 22 00 * 017 32 00 * 090 00 00 018 05 00 *	72 00 00 # . 04 00 00 # . 12 00 00 # . 72 30 00 .
MIZUKAIOO J SHIRAZ IRAN SHIRAZ IRAN SHIRAZ IRAN SHIRAZ IRAN	36 00 56 N 29 38 40 N 29 38 40 N 29 38 40 N 29 38 40 N	139 59 18 052 31 33 052 31 33 052 31 33 052 31 33	12 1600 1600 1600	12 23 53.00 17 27 26.16 17 27 51.50 17 28 16.97 17 28 25.30	225 00 00 020 08 40 * 020 24 00 * 020 34 30 * 020 37 15 *	52 30 00 67 19 00 * 60 13 00 * 52 30 48 * 50 00 00 *
SHIRAZ IRAN ATHENS GR ATHENS GR ATHENS GR ATHENS GR	29 38 40 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	052 31 33 023 43 01 023 43 01 023 43 01 023 43 01	1600 110 110 110 110	17 28 42.18 19 03 33.00 19 04 09.00 19 04 52.00 19 04 53.00	020 39 36 * 009 57 00 * 010 12 00 * 011 00 00 * 010 48 00 *	45 00 00 * 60 24 00 * 65 00 00 * 71 18 00 * 70 48 00 *
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	19 05 11.50 19 05 38.00 19 06 04.50 19 06 11.00 19 06 16.50	011 30 00 # 012 54 00 # 015 18 00 # 015 51 00 # 016 46 00 #	75 36 00 * 78 42 00 * 79 12 00 * 78 18 00 * 76 54 00 *
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	19 06 50.50 19 07 16.50 19 07 45.00 19 08 09.50 19 08 29.00	018 20 00 * 019 05 00 * 019 35 00 * 019 48 00 * 020 02 00 *	70 54 00 * 63 42 00 * 52 36 00 * 45 18 00 * 38 12 00 *

		LONGITUOE	HEIGHT	TIME GMT	AZIMUTH	F/ =	
STATION	LATITUDE	EAST	IN METERS	HR MIN SEC	OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			18 AUG 1958	CONT;			
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	19 08 56.00 19 09 48.00 19 09 57.00 19 10 43.50 19 10 44.00	020 10 00 * 020 29 00 * 020 35 00 * 020 43 00 * 020 35 00 *	31 24 00 * 14 24 00 * 10 18 00 * 05 00 00 * 02 48 00 *	
ATHENS GR HILVRSM NETH HILVRSM NETH HILVRSM NETH HILVRSM NETH	37 58 19 N 52 12 23 N	023 43 01 005 10 05 005 10 05 005 10 05 005 10 05	110	19 11 10.50 20 45 37.40 20 45 46.40 20 45 55.40 20 46 04.40	020 53 00 * 014 18 12 * 014 28 00 * 014 37 48 * 014 47 30 *	- 02 18 00 * 24 56 24 * 23 44 24 * 22 38 24 *	
HILVRSM NETH HILVRSM NETH BILTHVN NETH BILTHVN NETH BILTHVN NETH	52 12 23 N 52 12 23 N 52 08 27 N 52 08 27 N 52 08 27 N	005 10 05 005 10 05 005 12 46 005 12 46 005 12 46		20 46 13.40 20 46 22.50 20 46 49.20 20 46 58.10 20 47 06.80	014 57 12 * 015 07 00 * 015 35 36 * 015 44 48 *	21 44 00 # 20 34 00 # 19 14 00 # 16 04 00 # 14 24 00 #	
COPNGN A OEN BILTHVN NETH BILTHVN NETH WOKING ENG WEESP NETH	55 44 41 N 52 08 27 N 52 08 27 N 51 18 00 N 52 18 12 N	012 33 09 005 12 46 005 12 46 359 27 00 005 02 21		20 47 09.50 20 47 15.90 20 47 24.60 20 48 56.00 20 49 56.06	015 54 00 * 015 42 00 * 016 02 48 * 016 11 36 * 018 20 00 *	13 54 00 * 01 12 00 * 12 14 00 * 10 24 00 * 26 00 00 *	
MADRID SP	40 24 30 N	356 18 43	655	20 51 59•61	019 00 00 *	- 78 36 00 *	
			19 AUG 1958		319 00 00 *	10 00 00 *	
CLEVELND A O PITTSBGH PA PITTSBGH PA WASH WLSN OC CLEVELND A O	41 29 46 N 40 29 00 N 40 29 00 N 38 50 00 N 41 29 46 N	278 12 16 280 00 00 280 00 00 282 59 24 278 12 16	220 381 381 220	01 50 41.00 01 50 47.00 01 50 48.00 01 50 58.00 01 51 15.00	337 00 00 332 45 00 332 27 00 010 30 00 *	29 00 00 · · · · · · · · · · · · · · · ·	
WASH WLSN OC DUNLAP ONTAR CLEVELND A O OAYTON B O CLEVELND A O	38 50 00 N 43 51 46 N 41 29 46 N 39 50 14 N 41 29 46 N	282 59 24 280 34 40 278 12 16 275 44 03 278 12 16	244 220 249 220	01 51 36.00 01 51 49.30 01 51 51.00 01 52 11.00 01 52 26.00	011 00 00 * 013 42 00 * 343 00 00 020 30 00 * 349 48 00	35 00 00 62 24 00 * 64 24 00 * 43 00 00 89 00 00 * 51 36 00	
OK CY A OKLA WASH WLSN DC BRYN ATHN PA OAYTON B O CHI FAXN ILL	35 33 50 N 38 50 00 N 40 08 00 N 39 50 14 N 41 59 00 N	262 29 20 282 59 24 284 56 00 275 44 03 272 21 00	360 85 249 218	01 52 58.00 01 53 20.00 01 53 38.00 01 53 39.00 01 54 09.00	045 00 00 014 30 00 * 015 24 00 * 020 57 00 *	20 00 00 71 00 00 * 59 00 00 * 61 15 00 *	
PATERSON NJ COLUMBUS O DAYTON B O WASH WLSN DC WASH WLSN OC	40 54 00 N 40 01 49 N 39 50 14 N 38 50 00 N 38 50 00 N	285 51 CC 276 57 46 275 44 03 282 59 24 282 59 24	30 229 249	01 54 13.00 01 54 31.00 01 54 32.00 01 54 37.00 01 55 00.00	013 22 00 * 020 35 00 * 020 40 00 * 017 54 00 * 018 23 00 *	57 30 00 56 00 00 * 46 30 00 * 30 45 00 * 57 24 00 * 50 06 00 *	
MILLBROOK NY WASH WLSN DC TERRHAUT IND CLEVELND A O PATERSON NJ	41 51 30 N 38 50 00 N 39 31 38 N 41 29 46 N 40 54 00 N	286 22 33 282 59 24 272 36 10 278 12 16 285 51 00	243 155 220 30	01 55 08.00 01 55 28.00 01 55 42.00 01 56 45.00 01 57 00.00	017 33 00 * 018 52 00 * 090 00 00 136 00 00 00 00 017 50 00 *	26 40 00 * 40 42 00 * 43 32 00 41 00 00 29 00 00 *	
DUNLAP ONTAR WASH WLSN DC ©LEVELNO 4' O OAYTON B O CLEVELNO A O	43 51 46 N 38 50 00 N 41 29 46 N 39 50 14 N 41 29 46 N	280 34 40 282 59 24 278 12 16 275 44 03 278 12 16	244 220 249 220	01 57 03.00 01 57 13.00 01 57 39.00 01 58 31.00 01 58 59.00	020 04 00 * 019 55 00 * 139 00 00 021 12 00 * 143 00 00	- 06 12 00 * 09 48 00 * 32 00 00 * 24 00 00 *	
WASH WLSN OC CLEVELNO A O OANVILLE ILL ALBUO A NM WHTIER A CAL	38 50 00 N 41 29 46 N 40 08 57 N 35 05 03 N 33 58 40 N	282 59 24 278 12 16 272 22 26 253 21 24 241 58 25	220 189 1520 149	01 59 09:00 01 59 17:00 03 22 45:00 03 35 13:50 03 35 19:00	020 29 00 * 020 55 00 * 025 21 00 017 15 00 * 023 58 00 *	- 11 36 00 * - 15 00 00 * 35 40 00 88 30 00 * 55 30 00 *	
CLEVELNO A O OAYTON B O AMES A IOWA AMES A IOWA CLEVELNO A O	41 29 46 N 39 50 14 N 42 01 59 N 42 01 59 N 41 29 46 N	278 12 16 275 44 03 266 22 00 266 22 00 278 12 16	220 249 305 305 220	03 36 15.00 03 36 20.00 03 36 24.00 03 36 59.00 03 37 08.00	278 00 00 C14 28 00 * 309 48 00 253 00 00 268 00 00	17 00 00	
AMES A IOWA AMES A IOWA CLTVELNO A O MEMPHIS TENN AMES A IOWA	42 01 59 N 42 01 59 N 41 29 46 N 35 09 26 N 42 01 59 N	266 22 00 266 22 00 278 12 16 270 0# 46 266 22 00	305 305 220 85 305	03 37 35.00 03 38 11.00 03 38 20.00 03 38 43.50 03 38 46.00	232 00 00 222 00 00 256 00 00 270 00 00 211 00 00	48 00 00 46 00 00 22 12 00 47 30 00 43 00 00	
OANVILLE ILL CLEVELNO A O	40 08 57 N 41 29 46 N	272 22 26 278 12 16	189 220	03 39 01•00 03 39 22•00	236 30 00 245 00 00	35 30 00 22 00 00	

STATION	LATITUOE	LONGITUCE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION SLANT OR RANGE OECLINATION* IN KM
			19 AUG 1958	(CONT)		
AMES A IOWA OK CY A OKLA WICHITA KAN CLEVELNO A O LAWTON OKLA	42 01 59 N 35 33 50 N 37 41 44 N 41 29 46 N 34 39 44 N	266 22 00 262 29 20 262 45 19 278 12 16 261 35 47	305 360 413 220 358	03 39 31.00 03 39 49.00 03 39 50.30 03 39 59.00 03 40 17.00	199 00 00 019 04 00 * 019 01 00 * 237 00 00 155 30 00	38 00 00 11 00 00 * 01 45 00 * 21 00 00 62 18 00
BILOXI MISS AMES A IOWA PORTLANO ORE SAN JOSE CAL MAUI HAWAII	30 23 27 N 42 01 59 N 45 29 19 N 37 23 01 N 20 42 36 N	271 08 28 266 22 00 237 22 27 238 11 13 203 44 23	7 305 46 122 3048	03 40 22.00 03 40 24.38 05 17 47.00 05 22 15.50 07 04 31.02	270 00 00 190 00 00 016 24 00 * 180 00 00 022 30 00 *	54 00 00 32 00 00 20 12 00 * 51 00 00 46 39 00 *
MAUI HAWAII HGSHMTSYMA J MIYAZAKI J HYO SV B 2 J KANYAMACHI J	20 42 36 N 36 02 22 N 31 55 23 N 34 35 23 N 34 03 46 N	203 44 23 139 23 54 131 25 24 133 46 15 135 15 10	3048 31 8 5 40	07 04 35.01 10 22 44.00 12 05 23.00 12 06 35.00 12 07 12.00	022 29 24 * 023 18 00 * 014 29 00 * 016 50 00 * 017 24 00 *	45 47 00 * 49 00 00 * 76 00 00 * 52 09 00 *
HYO SV B 2 J KONKO J KAGOSHIMA J YATSUSHIRO J MITAKA J	34 35 23 N 34 32 31 N 31 31 34 N 32 30 21 N 35 40 20 N	133 46 15 133 37 40 130 31 47 130 36 15 139 32 30	5 4 13 3 50	12 07 29.00 12 07 31.87 12 08 23.90 12 08 50.00 12 09 09.30	019 15 00 # 270 00 00 029 10 00 # 164 00 00 217 12 00	13 00 00 * 82 30 00 37 00 00 * 66 00 00 52 30 00
HYD SV B 2 J FUCHU J SHIRAZ IRAN SHIRAZ IRAN SHIRAZ IRAN	34 35 23 N 34 34 17 N 29 38 40 N 29 38 40 N 29 38 40 N	133 46 15 133 14 19 052 31 33 052 31 33 052 31 33	5 30 1600 1600	12 09 29.00 12 09 35.00 17 11 48.79 17 13 03.50 17 14 02.36	C19 15 00 * C19 35 00 * C19 35 30 * C19 25 30 * C20 21 18 * C20 38 18 *	13 00 00 * 07 00 00 * 76 18 00 * 55 55 00 *
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	18 19 54.10 18 48 32.60 18 49 18.10 18 50 11.60 18 50 38.60	010 39 00 * 009 49 00 * 009 59 00 * 011 11 00 * 012 44 00 *	73 48 00 * 64 12 00 * 66 18 00 * 76 12 00 *
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	18 51 06.60 18 51 09.00 18 51 24.10 18 51 34.00 18 51 41.60	015 50 00 # 015 55 00 # 016 50 00 # 017 51 00 # 018 03 00 #	79 00 00 * 78 00 00 * 77 00 00 * 77 00 00 * 73 48 00 *
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110	18 52 00.60 18 52 04.00 18 52 26.60 18 52 49.60 18 53 02.00	018 34 00 * 018 25 00 * 019 18 00 * 019 31 00 * 019 46 00 *	66 36 00 * 65 00 00 * 57 30 00 * 53 00 00 *
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	18 53 03.10 18 53 19.10 18 53 36.60 18 54 30.60 18 54 46.00	019 44 00 * 019 51 00 * 020 02 00 * 020 17 00 * 020 15 00 *	45 54 00 * 40 36 00 * 34 12 00 * 17 18 00 * 10 24 00 *
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	18 54 49.60 18 55 07.60 18 55 26.10 18 55 43.60 18 56 10.10	020 22 00 * 020 23 00 * 020 28 00 * 020 30 00 * 020 34 00 *	13 00 00 * 08 54 00 * 04 48 00 * 00 54 00 * 00 * 00 00 *
ATHENS GR ATHENS GR ATHENS GR CAMBR U ENG BEXHILL ENG	37 58 19 N 37 58 19 N 37 58 19 N 52 12 51 N 50 51 00 N	023 43 01 023 43 01 023 43 01 000 05 41 000 30 00	110 110 110 28	18 56 28.60 18 56 46.60 18 57 03.60 20 29 17.90 20 29 36.00	020 38 00 * 020 42 00 * 020 46 00 * 287 12 00 294 00 00	- 05 06 00 * - 08 42 00 * - 11 06 00 * 32 42 00 32 00 00
CHELMSFO ENG CAMBR U ENG FARNHAM ENG BEXHILL ENG BATTERSE ENG	51 43 00 N 52 12 51 N 51 12 00 N 50 51 00 N 51 28 00 N	000 30 00 000 05 41 359 12 00 000 30 00 359 51 00	28	20 29 45.00 20 30 19.50 20 30 52.00 20 31 05.00 20 31 10.70	014 51 00 * 268 18 00 015 04 00 * 262 00 00 015 28 00 *	29 00 00 *- 42 54 00 31 30 00 *- 46 00 00 28 36 00 *-
CAMBR U ENG HERSTMCX ENG HORSBROG ENG CAMBR U ENG CAMBR U ENG	52 12 51 N 50 52 01 N 50 53 00 N 52 12 51 N 52 12 51 N	000 05 41 000 20 16 000 15 00 000 05 41 000 05 41	28 32 28 28	20 31 13.20 20 31 32.00 20 31 38.00 20 31 55.40 20 32 32.80	242 54 00 248 00 00 246 00 00 221 06 00 205 48 00	48 18 00 50 00 00 50 00 00 47 30 00 44 06 00
HORSBROG ENG MILLHILL ENG BEXHILL ENG CAMBR U ENG MILLHILL ENG	50 53 00 N 51 37 00 N 50 51 00 N 52 12 51 N 51 37 00 N	000 15 00 359 46 00 000 30 00 000 05 41 359 46 00	28	20 32 41.00 20 32 56.00 20 33 24.00 20 33 27.70 20 33 40.00	209 00 00 017 40 00 * 198 00 00 189 54 05 017 59 00 *	49 00 00 04 06 00 * 43 00 00 36 54 00 00 54 00 *

STATION	LATITUDE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION+	SLANT RANGE IN KA
			19 AUG 195	B (CONT)			
S FERNNDO SP MAORIO SP CAMBR U ENG CAMBR U ENG CAMBR U ENG	36 27 42 N 40 24 30 N 52 12 51 N 52 12 51 N 52 12 51 N	353 47 42 356 18 43 000 05 41 000 05 41 000 05 41	30 655 28 28 28	20 33 48 38 20 34 05 00 20 34 09 10 20 34 50 10 20 35 40 60	021 31 48 * 019 30 00 * 162 24 00 177 06 00 172 24 00	62 52 01 # 47 00 00 # 31 54 00 27 18 00	
MADRID SP HERSTMCX ENG CAMBR U ENG MAORIO SP	40 24 30 N 50 52 01 N 52 12 51 N 40 24 30 N	356 18 43 000 20 16 000 05 41 356 18 43	655 32 28 655	20 35 52.00 20 36 43.00 20 36 43.90 20 37 07.00	020 20 00 * 170 00 00 168 24 00 020 50 00 *	22 06 00 16 00 00 * 20 00 00 16 48 00 - 09 00 00 *	
			20 AUG 195	8			
CLEVELND A O PITTSBGH PA OUNLAP ONTAR PATERSON NJ CAROC CAN	41 29 46 N 40 29 00 N 43 51 46 N 40 54 00 N 46 47 10 N	278 12 16 280 00 00 280 34 40 285 51 00 288 43 45	220 381 <b>244</b> 30 91	01 34 21 00 01 35 57 00 01 36 51 50 01 37 19 00 01 37 29 30	334 00 00 334 28 00 014 32 00 * 012 46 00 * 014 53 00 *	20 00 00 28 43 00 63 05 00 # 56 00 00 # 29 18 00 *	
DAYTON B O CHI CPLN ILL TERRHAUT INO CAROC CAN OANVILLE ILL	39 50 14 N 41 51 58 N 39 31 38 N 46 47 10 N 40 08 57 N	275 44 03 272 23 35 272 36 10 288 43 45 272 22 26	249 194 155 91 189	01 37 33.00 01 37 J2.60 01 38 09.02 01 38 39.70 01 38 56.00	021 40 00 * 021 20 00 * 045 00 00 016 14 00 * 067 30 00	70 15 00 # 54 03 12 # 45 32 00 17 42 00 # 46 00 00	
CAROC CAN ARLINGTON VA BALTIMORE MD GRNSBRO A NC ELTHRA A BWI	46 47 10 N 38 50 48 N 39 24 28 N 36 04 38 N 25 16 03 N	288 43 45 282 53 35 283 24 35 280 07 57 283 41 12	91 59 144 265 38	01 39 23 00 01 39 31 00 01 39 52 00 01 40 36 00 01 42 20 00	016 56 00 * 000 00 00 00 00 00 00 00 00 00 00	09 24 00 # 78 06 00 88 00 00 42 30 00 # 43 47 42	
ELTHRA A BWI ELTHRA A BWI ELTHRA A BWI ELTHRA A BWI ELTHRA A BWI	25 16 03 N 25 16 03 N 25 16 03 N 25 16 03 N 25 16 03 N	283 41 12 283 41 12 283 41 12 283 41 12 283 41 12	38 38 36 38 36	01 42 30.00 01 42 40.00 01 42 50.00 01 43 00.00 01 43 10.00	030 57 00 034 09 00 037 46 30 041 37 12 045 36 00	45 18 54 46 24 00 47 32 24 48 31 30	
ELTHRA A BWI CLEVELND A O ELTHRA A RWI OUNLAP ONTAR AMES A IOWA	25 16 03 N 41 29 46 N 25 16 03 N 43 51 46 N 42 01 59 N	283 41 12 278 12 16 283 41 12 280 34 40 266 22 00	38 220 38 244 305	01 43 20.00 01 43 26.00 01 43 30.00 02 56 23.00 03 20 39.00	049 56 42 138 00 00 048 21 00 017 52 00 # 276 06 00	49 26 06 50 05 06 25 00 00 50 10 30 04 04 00 #	
AMES IOWA CHI FAXN ILL AMES A IOWA AMES IOWA CLEVELNO A O	42 01 49 N 41 59 00 N 42 01 59 N 42 01 49 N 41 29 46 N	266 20 59 272 21 00 266 22 00 266 20 59 278 12 16	216 305 220	03 20 47.00 03 21 15.00 03 21 25.00 03 21 32.00 03 21 51.00	015 13 52 * 270 00 00 257 36 00 016 01 29 *	41 48 00 · · · · · · · · · · · · · · · · · ·	
AMES A IOWA AMES IOWA AMES IOWA OAYTON 8 O OANVILLE ILL	42 01 59 N 42 01 49 N 42 01 49 N 39 50 14 N 40 08 57 N	266 22 00 266 20 59 266 20 59 275 44 03 272 22 26	305 249 189	03 22 00.00 03 22 16.00 03 22 25.00 03 22 33.00 03 22 45.00	266 00 00 242 36 00 016 43 27 * 016 50 51 * 015 33 00 * 252 06 00	25 00 00 47 36 00 12 31 51 * 10 46 28 * 11 20 00 *	
AMES A IOWA CLEVELND A O MEMPHIS TENN AMES A IOWA FT WTH A TEX	42 01 59 N 41 29 46 N 35 09 26 N 42 01 59 N 32 42 27 N	266 22 00 278 12 16 270 08 46 266 22 00 262 38 14	305 220 85 305 182	03 22 52.00 03 22 54.00 03 23 19.00 03 23 29.00 03 24 07.00	221 06 00 251 12 00 270 00 00 208 36 00	35 36 00 45 42 00 25 54 00 46 00 00 41 54 00	
DALLAS P TEX AMES A IOWA CLEVELND A O AMES A IOWA BILOXI MISS	32 51 10 N 42 01 59 N 41 29 46 N 42 01 59 N 30 23 27 N	263 14 29 266 22 00 278 12 16 266 22 00 271 08 28	172 305 220 305 7	03 24 10.00 03 24 22.00 03 24 32.00 03 24 48.00 03 24 59.00	018 41 00 * 018 17 00 * 196 06 00 232 00 00 192 06 00 270 00 00	31 45 00 * 29 40 00 * 35 18 00 25 00 00 32 42 00	
S AN RAFB TX CHI CPLN ILL AMES A IOWA CLEVELNO A O CLEVELNO A O	29 32 06 N 41 51 58 N 42 01 59 N 41 29 46 N 41 29 46 N	261 42 33 272 23 35 266 22 00 278 12 16 278 12 16	232 194 305 220	03 25 03.70 03 25 15.30 03 25 24.96	018 59 00 # 017 34 31 # 187 06 00 224 00 00 017 21 00 #	54 00 00 25 50 00 # * 15 26 48 # 28 42 00 23 00 00	
SACMTO E CAL ALMGDO-GS.NM ALMGDO-GS.NM PORTLAND ORE DAVIS CAL	38 32 55 N 32 52 22 N 32 52 22 N 45 29 19 N 38 19 48 N	238 14 51 254 03 05 254 03 05 237 22 27 238 31 12	15 1339 1339 46	05 04 12.90 05 05 03.00 05 05 18.00 .05 06 58.00 06 49 14.90	017 21 00 *  017 13 02 *  014 46 00 *  014 55 00 *  019 02 00 *  015 59 50 *	- 21 00 00 * 24 53 00 * 22 06 00 * 20 24 00 * - 21 42 00 *	
SAPPORO J MIZUKA100 J ISAHAYA J YATSUSHIRO J MUSASHINO J	43 04 49 N 36 00 56 N 32 51 41 N 32 30 21 N 35 42 58 N	141 22 13 139 59 18 130 03 08 130 36 15 139 34 35	20 12 70 3 75	11 49 40.00 11 51 23.00 11 52 00.00 11 52 50.00 11 52 58.20	015 11 00 * 270 00 00 019 40 00 * 009 00 00 225 00 00	- 08 23 00 * 20 00 00 * 50 00 00 * 71 00 00 54 30 00	

STATION	LATITUDE	LONGITUDE EAST	HEIGHT TIME GMT IN IN METERS HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			20 AUG 1958 (CONT)			
NWIAT IBPIAT L AMIHROBAN L IHDAMAYNAN L UHDUR L AMIHROBAN	25 02 42 N 31 31 34 N 34 03 46 N 34 34 17 N 31 31 34 N	121 30 02 130 31 47 135 15 10 133 14 19 130 31 47	22 11 53 48 070 13 11 54 11 00 40 11 54 28 00 30 11 54 35 00 13 35 18 00	022 50 00 # 020 27 00 # 019 20 00 # 015 18 00 #	42 18 00 * 11 00 00 * - 04 00 00 * - 03 00 00 * 10 00 00 *	
YATSUSHIRO J TAIPEI TAIWN SHIRAZ IRAN SHIRAZ IRAN SHIRAZ IRAN	32 30 21 N 25 02 42 N 29 38 40 N 29 38 40 N 29 38 40 N	130 36 15 121 30 02 052 31 33 052 31 33 052 31 33	3 13 36 18.00 22 13 37 22.10 1600 16 55 41.32 1600 16 57 39.30 1600 16 58 34.07	260 00 00 015 58 30 * 019 01 30 * 020 24 24 * 020 36 12 *	19 00 00 27 10 00 * 79 44 00 * 20 45 00 * 30 58 00 *	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 18 32 40.00 110 18 33 07.00 110 18 33 45.00 110 18 33 59.00 110 18 34 28.00	009 51 00 # 010 10 00 # 011 00 00 # 010 55 00 # 011 49 00 #	62 00 00 # 63 18 00 # 74 06 00 # 76 00 00 # 77 06 00 #	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 42 01 023 43 01 023 43 01 023 42 01	110 18 34 46.00 110 18 35 C0.00 110 18 35 C4.00 110 18 35 22.00 110 18 35 47.00	013 15 00 # 014 50 00 # 015 17 00 # 016 48 00 # 018 05 00 #	79 30 00 * 80 00 00 * 79 48 00 * 77 12 00 * 72 30 00 *	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 18 35 48.00 110 18 35 50.00 110 18 36 06.00 110 18 36 26.00 110 18 36 50.00	018 11 00 # 018 20 00 # 018 46 00 # 019 10 00 # 019 32 00 #	71 42 00 # 68 00 00 # 66 48 00 # 69 06 00 # 52 00 00 #	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 18 37 04.00 110 18 37 06.00 110 18 37 37.00 110 18 37 38.00 110 18 37 39.00	C19 41 00 * 019 37 00 * 019 50 00 * 019 56 00 * 019 50 00 *	45 24 00 * 44 00 00 * 35 18 00 * 34 30 00 * 33 30 00 *	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	115 18 37 53 00 110 18 38 27 00 110 18 38 57 00 110 18 39 23 00 110 18 39 26 00	019 58 00 # 020 05 00 # 020 15 00 # 020 20 00 # 020 15 00 #	30 24 00 # 20 00 00 # 12 00 00 # 04 12 00 #	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 18 40 00.00 110 18 40 12.00 110 18 40 17.00 110 18 40 53.00 110 18 41 16.00	020 23 00 # 020 24 00 # 020 25 00 # 020 27 00 # 020 37 00 #	00 12 00 * - 04 00 00 * - 01 30 00 * - 04 36 00 * - 10 12 00 *	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 18 41 12.00 110 18 41 30.00 110 18 41 47.00 110 18 42 05.00 110 19 38 57.00	020 26 00 * 020 39 00 * 020 42 00 * 020 45 00 * 020 18 00 *	- 12 00 00 * - 12 36 00 * - 14 00 00 * - 16 00 00 * - 11 30 00 *	
HILVRSM NETH HILVRSM NETH BUSSUM NETH HILVRSM NETH HILVRSM NETH	52 12 23 N 52 12 23 N 52 16 52 N 52 12 23 N 52 12 23 N	005 10 05 005 10 05 005 09 18 005 10 05 005 10 05	20 14 42.20 20 14 51.20 20 15 00.10 20 15 00.10 20 15 08.00	014 10 48 # 014 20 48 # 014 32 18 # 014 30 48 # 014 40 48 #	24 04 00 # 22 56 24 # 22 21 00 # 21 50 24 #	•
HILVRSM NETH FARNHAM ENG BUSSUM NETH ABBEVILLE FR FARNSORO ENG	52 12 23 N 51 12 00 N 52 16 52 N 50 07 30 N 51 18 00 N	005 10 05 359 12 00 005 09 18 001 49 42 359 12 00	20 15 18.00 20 15 22.00 20 16 03.70 20 16 18.00 20 17 00.00	014 50 48 * 015 33 00 * 015 40 24 * 214 00 00 017 24 00 *	20 34 00 * 19 38 24 * 30 00 00 * 13 02 00 * 48 00 00	
HANOVR C GER BUSSUM NETH WEESP NETH	52 24 06 N 52 16 52 N 52 18 12 N	009 45 33 005 09 13 005 02 21	20 17 32.60 20 18 18.50 20 18 51.55 21 AUG 1958	016 20 24 * 017 25 18 * 017 47 42 *	02 30 00 *  13 06 00 * 06 43 12 * 12 03 00 *	
OAYTON B O MILLSROOK NY PITTSBGH PA WASH WLSN OC WASH WLSN OC	39 50 14 N 41 51 30 N 40 29 00 N 38 50 00 N 38 50 00 N	275 44 C3 286 22 33 280 00 00 282 59 24 282 59 24	249 01 20 09.00 243 01 20 10.00 381 01 20 28.00 01 20 31.00 01 21 53.00	354 04 00 013 12 00 * 338 15 00 011 04 00 * 014 23 00 *	33 30 00 55 35 00 * 36 51 00 * 72 24 00 *	
OAYTON B O OAYTON B O DUNLAP ONTAR ST COLL PA WASH WLSN DC	39 50 14 N 39 50 14 N 43 51 46 N 40 44 01 N 38 50 00 N	275 44 03 275 44 03 280 34 40 282 05 33 282 59 24	249 01 21 54.00 249 01 22 56.50 244 01 22 58.00 393 01 22 59.00 01 23 12.00	020 55 00 * 020 48 00 * 018 36 00 * 018 06 52 * 017 51 00 *	66 15 00 * 46 40 00 * 28 48 00 * 48 00 00 * 56 36 00 *	

STATION	LATITUOE	LONGITUFE EAST	HFIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			21 AUG 1958	(CONT)			
FT BELVR VA OAYTON B O WASH WLSN OC TERRHAUT INO OAYTON B O	38 45 30 N 39 50 14 N 38 50 00 N 39 31 38 N 39 50 14 N	282 46 42 275 44 03 282 59 24 272 36 10 275 44 03	95 249 155 249	01 23 18.00 01 23 37.00 01 24 07.00 01 24 28.20 01 24 42:50	000 00 00 020 42 00 # 018 45 00 # 090 C0 00 020 52 00 #	74 00 00 33 05 00 # 40 00 00 # 38 00 00 16 15 00 #	
WASH WLSN OC OANVILLE ILL ELTHRA A BWI ELTHRA A BWI WASH WLSN OC	38 50 00 N 40 08 57 N 25 16 03 N 25 16 03 N 38 50 00 N	282 59 24 272 22 26 283 41 12 283 41 12 282 59 24	189 38 28	01 25 44.00 01 26 56.00 01 27 20.00 01 27 50.00 01 27 56.00	019 40 00 # 117 00 00 054 01 48 066 40 12 020 13 00 #	09 54 00 * 30 30 00 49 42 54 50 43 30 - 22 00 00 *	
ELTHRA A BW: ELTHRA A BW! ELTHRA A BW! ELTHRA A BW! ELTHRA A BW!	25 16 03 N 25 16 03 N 25 16 03 N 25 16 03 N 25 16 03 N	283 41 12 283 41 12 283 41 12 283 41 12 283 41 12	38 38 38 38 35	01 28 00.00 01 28 10.00 01 28 20.00 01 28 30.00 01 28 40.00	070 53 06 075 04 12 078 57 00 082 40 12 086 10 12	50 39 36 50 26 24 50 02 24 49 31 30 48 53 24	
ELTHR4 A BWI WASH WLSN OC OAYTON B O OAYTON B O DAYTON B O	25 16 03 N 38 50 00 N 39 50 14 N 39 50 14 N 39 50 14 N	283 41 12 282 59 24 275 44 03 275 44 03 275 44 03	38 249 249 249	01 28 50 00 01 29 39 00 03 05 05 50 03 05 40 00 03 07 04 00	089 35 24 020 26 00 * 278 18 00 014 05 00 * 015 42 00 *	48 04 30 - 22 00 00 * 24 35 00 24 00 00 * 06 30 00 *	
MEMPHIS TENN S AN RAFB TX BRYAN TEX SACMTO E CAL SUNYVALE CAL	35 09 26 N 29 32 06 N 30 38 14 N 38 32 55 N 37 21 00 N	270 08 46 261 42 33 263 39 58 238 14 51 237 56 24	85 232 92 15 61	03 07 08 00 03 08 59 10 03 11 14 30 04 47 42 00 04 48 00 00	270 00 00 019 50 42 * 020 12 00 * 016 41 26 * 016 59 48 *	49 50 00 29 24 00 * - 15 30 00 * 31 43 00 * 33 39 00 *	
PORTLAND ORE HIMEJI J OITA J YATSUSHIRO J MITAKA J	45 29 19 N 34 50 25 N 33 36 06 N 32 30 21 N 35 40 20 N	237 22 27 134 41 24 131 11 57 130 36 15 139 32 30	46 25 4 3 50	C4 52 35.00 C1 33 46.00 11 35 26.00 11 35 35.00 11 36 01.30	019 24 00 * 319 12 00 019 03 00 * 018 15 00 * 243 48 00	= 29 48 00 # 51 30 00 42 00 00 # 34 00 00 # 58 24 00	
YATSUSHIRO J MATTAKA J L IHOAMAYNAX L UHOUF L AMIRODAX	32 30 21 N 35 40 20 N 34 05 46 N 34 34 17 N 31 31 34 N	130 36 15 139 32 30 135 15 10 133 14 19 130 31 47	3 50 40 30 13	11 36 14.00 11 36 21.30 11 36 25.00 11 36 07.00 11 38 47.00	090 00 00 232 18 00 018 12 00 * 019 36 00 * 020 34 00 *	69 00 00 57 48 00 22 00 00 * ~ 04 00 00 * 03 00 00 *	
KAGOSHIMA J TAIPEI TAIWN MIL RAD MASS ATHENS GR ATHENS GR	31 31 34 N 25 02 42 N 42 37 03 N 37 58 19 N 37 58 19 N	130 31 47 121 35 02 288 35 28 023 43 01 023 43 01	13 22 155 110	13 17 52.00 13 18 31.40 16 13 10.84 18 17 23.00 16 17 27.00	014 38 00 * 014 57 00 * 222 18 00 011 00 00 * 010 48 00 *	16 00 00 ** 39 06 00 ** 51 48 00 78 00 00 ** 76 00 00 **	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	18 17 28 50 18 18 05 00 18 18 15 00 18 18 32 00 18 19 02 00	336 00 00 347 00 00 014 40 00 * 353 00 00 018 05 00 *	32 00 00 40 00 00 82 30 00 * 46 48 00 71 30 00 *	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	18 19 05.00 18 19 05.00 18 19 23.00 18 19 51.50 18 29 06.00	018 20 00 * 004 00 00 018 55 00 * 028 42 00 019 30 00 *	70 36 00 4 56 42 00 65 30 00 4 68 36 00 51 42 00 4	•
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	18 20 23.00 16 20 29.50 18 20 56.00 18 21 05.00 18 21 50.00	019 35 00 * 062 42 00 019 48 00 * 089 06 00 115 24 00	70 00 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	18 22 17.00 18 22 23.00 18 22 43.00 18 22 53.00 18 22 59.50		20 00 00	* *
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110	19 23 34.50 18 24 19.70 18 24 24.00 18 24 40.00 18 24 56.50	020 27 00 1		
S FERNNDO SP ATHENS GR ATHENS GR ATHENS GR ATHENS GR	36 27 42 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	353 47 42 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110	20 01 27.57 20 02 36.40 20 03 21.40 20 03 57.40 20 05 08.40	274 48 00 268 36 00 257 48 00	54 00 00 19 36 00 21 00 00 22 12 00 22 48 00	*

STATION	LATITUDE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION#	SLANT RANGE IN KM
ATHENS GR ATHENS GR ATHENS GR S FERNNDO SP	37 58 19 N 37 58 19 N 37 58 19 N 36 27 42 N	023 43 01 023 43 01 023 43 01 353 47 42	21 AUG 1958 110 110 110 30 22 AUG 1958	20 06 00.90 20 06 56.40 20 67 40.40 21 45 22.60	236 30 00 226 48 00 220 24 00 015 45 30 *	23 24 00 22 42 00 19 48 00 53 04 00 #	
ARLINGTON VA DUNLAP ONTAR AMES A IOWA AMES A IOWA AMES A IOWA	38 50 48 N 43 51 46 N 42 01 59 N 42 01 59 N 42 01 59 N	282 53 35 280 34 40 266 22 00 266 22 00 266 22 00	59 244 305 305 305	01 06 12.00 01 06 51.00 02 44 53.00 02 45 16.00 02 45 38.00	000 00 00 019 04 00 # 307 36 00 305 06 00 301 36 00	72 00 00 14 48 00 * 22 00 00 25 10 12 28 30 00	
AMES A IOWA MLWKEE A WIS DAYTON B O AMES IOWA	42 01 59 N 42 01 59 N 42 58 07 N 39 50 14 N 42 01 49 N	266 22 00 266 22 00 271 51 C5 275 44 03 266 20 59	305 305 294 249	02 46 14.00 02 46 59.00 02 47 53.20 02 48 18.00 02 48 28.00	295 30 00 284 36 00 265 30 00 014 40 00 # 015 57 43 #	34 00 00 41 00 00 33 00 00 25 40 00 *	
OAYTON B O KANCITY MO AMES A 10WA CHI CPLN ILL AMES A 10WA	39 50 14 N 39 02 02 N 42 01 59 N 41 51 58 N 42 01 59 N	275 44 03 265 25 06 266 22 00 272 23 35 266 22 00	249 259 305 194 305	02 48 30.00 02 48 44.00 02 48 55.00 02 49 23.90 02 49 58.00	272 49 00 016 02 00 * 235 36 00 015 45 11 * 211 36 00	20 46 24 *  27 12 00 36 00 00 * 51 12 00 07 57 24 *	
DAYTON 8 O DAYTON B O WICHITA KAN AMES A IOWA AMES A IOWA	39 50 14 N 39 50 14 N 37 41 44 N 42 01 59 N 42 01 59 N	275 44 03 275 44 03 262 45 19 266 22 00 266 22 00	249 249 413 305 305	02 50 12 00 02 50 23 00 02 50 35 00 02 50 53 00 02 51 04 00	015 38 00 * 015 47 00 * 018 21 16 * 197 36 00 194 27 36	05 20 00 # 04 05 00 # 11 42 00 # 41 00 00	
OAYTON B O OANVILLE ILL OANVILLE ILL AMES A IOWA BILOXI MISS	39 50 14 N 40 08 57 N 40 08 57 N 42 01 59 N 30 23 27 N	275 44 03 272 22 26 272 22 26 266 22 00 271 08 28	249 189 189 305 7	02 51 07.00 02 51 13.00 02 51 13.20 02 51 28.00 02 51 47.00	016 03 00 * 220 42 00 220 42 00 189 00 00 270 00 00	38 01 48 - 03 20 00 * 54 54 00 35 06 00 35 00 00	
AMES A IOWA EOINBURG TEX AMES A IOWA AMES A IOWA AMES A IOWA	42 01 59 N 26 18 20 N 42 01 59 N 42 01 59 N 42 01 59 N	266 22 00 261 49 39 266 22 00 • 266 22 00 266 22 00	305 28 305 305 305	02 52 03:00 02 52 25:00 02 52 34:00 02 52 49:00 02 53 42:00	184 36 00 059 00 00 182 03 36 179 36 00 179 36 00	31 00 00 65 30 00 27 43 12 26 00 00	
AMES A IOWA AMES A IOWA BRYAN TEX SACMTO E CAL SUNYVALE CAL	42 01 59 N 42 01 59 N 30 38 14 N 38 32 55 N 37 21 00 N	266 22 00 266 22 00 263 39 58 238 14 51 237 56 24	305 305 92 15 61	02 54 02:00 02 54 19:00 03 50 06:72 04 30 20:10 04 31 28:80	175 42 36 173 36 00 018 20 00 * 016 18 34 * 017 29 00 *	21 12 00 19 39 36 18 12 00 51 00 00 # 37 06 00 #	
WHTIER A CAL MITAKA J YATSUSHIRO J SAPPORO J KAGOSHIMA J	33 58 40 N 35 40 20 N 32 3C 21 N 43 04 49 N 31 31 34 N	241 58 25 139 32 30 130 36 15 141 22 13 130 31 47	149 50 3 20 13	54 32 33.00 11 16 20.00 11 19 00.00 11 20 01.00 11 20 08.00	017 00 00 * 302 18 00 090 00 00 00 00 00 00 00 00 00 00 00	26 09 00 *  23 00 00 *  41 12 00  66 30 00  - 18 00 00 *	
MITAKA J KANYAMACHI J KAGOSHIMA J KAGOSHIMA J MIL RAO MASS	35 40 20 N 34 03 46 N 31 31 34 N 31 31 34 N 42 37 03 N	139 32 30 135 15 10 130 31 47 130 31 47 288 30 28	50 40 13 13	11 21 45.80 11 21 58.00 13 00 50.00 13 03 20.00 15 55 26.00	180 42 00 019 30 00 # 014 39 00 # 015 46 00 # 219 42 00	28 00 00 * 35 48 00 - 07 00 00 * 14 00 00 * - 04 00 00 *	
MIL RAO MASS MIL RAO MASS MIL RAO MASS OAKLAND CAL OAKLAND CAL	42 37 03 N 42 37 03 N 42 37 03 N 37 47 00 N 37 47 00 N	288 30 28 288 30 28 288 30 28 237 48 00 237 48 00	155 155 155 30 30	15 57 05.00 16 00 13.24 16 02 30.00 16 12 10.00 16 13 22.00	228 12 00 027 30 00 031 42 00 014 19 00 * 016 33 00 *	04 48 00 24 48 00 14 <b>2</b> 4 00 02 18 00 48 20 00 *	1273 5 <b>79</b> 2043
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110	17 59 57.00 18 00 14.80 18 00 37.00 18 00 51.30 18 02 29.80	011 00 00 * 350 06 00 014 50 00 * 355 54 00 046 24 00	81 00 00 * 81 00 00 * 38 18 00 83 00 00 * 46 36 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110	18 03 14.80 18 04 08.30 18 05 01.30 18 05 56.30 18 06 34.00	082 48 00 108 48 00 122 48 00 128 48 00	73 24 00 63 48 00 54 47 00 44 12 00 35 42 00	٠
ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01	110 110	18 06 41.30 18 07 07.00 18 07 35.30	020 25 00 * 131 00 00 020 30 00 * 134 00 00	- 08 00 00 # - 30 06 00 # - 12 00 00 # 24 24 00	

STATION	LATITUDE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION . OR DECLINATION*	SLANT RANGE IN KM
		ž	23 AUG 1958				
MIL RAO MASS MIL RAD MASS DAYTON B O MIL RAD MASS PATERSON NJ	42 37 03 N 42 37 03 N 39 50 14 N 42 37 03 N 40 54 00 N	288 30 28 288 30 28 275 44 03 288 30 28 285 51 00	155 155 249 155 30	00 45 05•18 00 46 07•00 00 47 59•00 00 48 11•00 00 48 42•00	314 18 00 307 48 00 054 27 00 262 18 00 017 17 00 *	26 00 00 37 06 00 52 02 00 63 18 00 37 00 00 *	1425 1133
N CANTON A O WASH WLSN DC MIL RAD MASS WASH WLSN OC MIL RAD MASS	40 55 54 N 38 50 00 N 42 37 03 K 38 50 00 N 42 37 03 N	278 32 40 282 59 24 288 30 26 282 59 24 288 30 28	366 155 155	00 49 08.00 00 49 12.00 00 50 20.00 00 51 59.00 00 53 10.00	019 56 00 * 018 53 00 * 185 54 00 019 37 00 # 167 18 00	24 24 00 # 36 00 00 # 49 42 00 09 00 00 # 25 24 00	1377 2183
MIL RAD MASS  OAYTON B O CHI CPEN ILL  DANVILLE ILL  BRYAN TEX	42 37 03 N 39 50 14 N 41 51 58 N 40 08 57 N 30 38 14 N	288 30 28 275 44 03 272 23 35 272 22 26 263 39 58	155 249 194 169 92	00 55 34.00 02 30 31.00 02 31 17.99 02 31 19.00 02 31 46.70	162 12 00 014 32 00 * 015 31 29 * 250 00 00 018 14 00 *	14 12 00 23 00 00 # 09 56 00 # 39 06 00 61 00 00 #	2983 .
OAYTON B O N CANTON A O DAYTON B O DAYTON B O BILOXI MISS	39 50 14 N 40 55 54 N 39 50 14 N 39 50 14 N 30 23 27 N	275 44 03 278 32 40 275 44 03 275 44 03 271 08 28	249 366 249 249 7	02 32 22.00 02 32 58.50 02 33 19.00 02 33 25.00 02 33 52.00	015 45 00 * 015 47 00 * 016 10 00 * 016 14 00 * 270 00 00	06 30 00 # - 03 12 00 # - 04 00 00 # - 05 00 00 # 59 30 00	
OAYTON B O EDINBURG TEX PORTLAND ORE ALBUO S NM TAKAOA J	39 50 14 N 26 18 20 N 45 29 19 N 35 03 18 N 37 06 38 N	275 44 03 261 49 39 237 22 27 253 23 30 138 15 22	249 28 46 1618 23	02 34 02.00 02 34 30.00 04 10 28.00 04 14 08.00 10 57 28.00	016 37 00 # 069 00 00 015 16 00 # 270 00 00 00 013 54 00 #	- 09 45 00 * 64 00 00 27 00 00 * 27 30 00 49 00 00 *	
ASAHIKAWA J ISAHAYA J KOCH! J ATHENS GR ATHENS GR	43 46 27 N 32 51 41 N 33 33 25 N 37 58 19 N 37 58 19 N	142 21 50 130 03 08 133 30 35 023 43 01 023 43 01	113 70 30 110	10 58 41.00 11 00 15.00 11 02 05.00 17 43 49.40 17 44 51.90	015 44 00 # 019 52 00 # 019 28 00 # 044 48 00 088 24 00	08 00 00 * 34 00 00 * 04 00 00 * 61 42 00 58 54 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 42 01 023 43 01 023 43 01 023 43 0.	110 110 110 110 110	17 45 36.90 17 46 03.40 17 46 35.90 17 47 07.40 18 29 51.30	107 00 00 114 18 00 119 42 00 122 36 00 008 00 00 **	51 48 00 46 36 00 42 24 00 37 00 00 73 42 00 #	E .
STFD RES CAL ATHENS GR ATHENS GR FARNHAM ENG	37 24 11 N 37 58 19 N 37 58 19 N 51 12 00 N	237 49 29 023 43 01 023 43 01 359 12 00	152 110 110	19 01 30.14 19 27 26.90 19 29 32.40 21 05 28.00	300 00 00 263 36 00 239 00 00 014 18 00 *	28 30 00 26 06 00 25 42 00 05 00 00	•
			24 AUG 195				
MILLBROOK NY DAYTON B O DAYTON B O OAYTON B O DALLAS P TEX	41 51 30 N 39 50 14 N 39 50 14 N 39 50 14 N 32 51 10 N	286 22 33 275 44 03 275 44 03 275 44 03 263 14 29	243 249 249 249 172	00 27 38.01 07 11 51.00 02 12 03.00 02 13 19.00 02 14 14.00	012 05 00 * 272 00 00 014 38 00 * 263 05 00 018 49 03 *	31 00 00 19 45 00 4 33 00 00	•
8ILOXI MISS EOINBURG TEX PORTLAND ORE ALRUO S NM ALRUO-GS NM	30 23 27 N 26 18 20 N 45 29 19 N 35 03 18 N 35 06 22 N	271 08 28 261 49 39 237 22 27 253 23 30 253 23 14	7 28 46 1618 1565	02 15 01.00 02 15 49.40 03 52 05.00 03 55 07.00 03 55 48.00	270 00 00 071 00 00 017 00 00 4 270 00 00 015 10 00 4	31 00 00	
WAKE IS PAC ASAHIKAWA J ASAHIKAWA J KAGOSHIMA J SHIRAZ IRAN	19 17 12 N 43 46 27 N 43 46 27 N 31 31 34 N 29 38 40 N	166 37 12 142 21 50 142 21 50 130 31 47 052 31 33	113 113 13 13	09 03 04.60 10 38 01.00 10 39 39.00 10 41 17.00 17 31 38.64	000 00 00 015 25 00 4 015 44 00 4 020 08 00 9	08 00 00 36 00 00	*
SHIRAZ IRAN SHIRAZ IRAN EL GOLEA ALG EL GOLEA ALG ATHENS GR	29 38 40 N 29 38 40 N 30 34 00 N 30 34 00 N 37 58 19 N	052 31 33 052 31 33 002 52 00 002 52 00 023 43 01	1600 1600	17 32 46.68 17 33 46.17 19 05 00.00 19 06 00.00 19 06 45.30	010 06 00 030 54 00		
EL GOLEA ALG EL GOLEA ALG ATHENS GR ATHENS GR ATHENS GR	30 34 00 N 30 34 00 N 37 58 19 N 37 58 19 N 37 58 19 N	002 52 00 002 52 00 023 43 01 023 43 01 023 43 01	110 110 110	19 07 00.00 19 08 00.00 19 08 08.80 19 08 24.80 19 08 51.80	108 54 00 264 00 0 <b>0</b> 255 24 00	52 30 00 44 00 00 27 00 00 27 24 00 27 54 00	
EL GOLFA ALG ATHENS GR ATHENS GR EL GOLEA ALG ATHENS GR	30 34 00 N 37 58 19 K 37 58 19 N 30 34 00 N 37 58 19 N	002 52 00 023 43 01 023 43 01 002 52 00 023 43 01	110 110	19 09 00.00 19 09 27.80 19 09 54.30 19 10 00.00 19 10 21.30	241 18 00 235 18 00 125 48 00	36 12 00 28 00 00 28 00 00 29 06 00 28 00 00	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			24 AUG 1958	(CONT)			
EL GOLEA ALG ATHENS GR ATHENS GR EL GOLEA ALG ATHENS GR	30 34 00 N 37 58 19 N 37 58 19 N 30 34 00 N 37 58 19 N	002 52 00 023 43 01 023 43 01 002 52 00 023 43 01	110 110	19 11 00.00 19 11 06.80 19 11 42.30 19 12 00.00 19 12 37.30	130 00 00 221 42 00 216 00 00 133 00 00 209 42 00	23 18 00 26 42 00 23 48 00 18 24 00 21 12 00	
ATHENS GR EL GOLEA ALG MADRIO SP HOUNSLOW ENG FARNHAM ENG	37 58 19 N 30 34 00 N 40 24 30 N 51 19 00 N 51 12 00 N	023 43 01 002 52 00 356 18 43 359 47 00 359 12 00	110 655	19 13 09.80 19 14 00.00 20 46 36.00 20 47 19.00 20 50 12.00	207 00 00 137 06 00 013 54 00 * 016 03 00 * 016 23 00 *	19 30 00 10 24 00 18 40 00 # - 08 30 00 # - 19 00 00 #	
			25 AUG 1958	)			
CURACAO NWI CURACAO NWI ALMGDO-GS,NM ALMGOO-GS,NM OAYTON 8 O	12 09 04 N 12 09 04 N 32 52 22 N 32 52 22 N 39 50 14 N	291 03 28 291 03 28 254 03 05 254 03 05 275 44 03	6 1339 1339 249	00 18 01.59 00 21 23.85 01 10 21.00 01 11 20.00 01 51 32.00	020 54 00 * 021 17 06 * 007 38 30 * 005 34 42 * 277 46 00	36 58 00 * - 04 52 00 * 67 42 00 * 59 12 00 * 31 32 00	
AMES IOWA AMES A IOWA DANVILLE ILL AMES A IOWA BRYAN TEX	42 01 49 N 42 01 59 N 40 08 57 N 42 01 59 N 30 38 14 N	266 20 59 266 22 00 272 22 26 266 22 00 263 39 58	305 189 305 92	01 51 38.00 01 52 16.00 01 52 46.00 01 53 19.00 01 53 35.50	015 49 27 # 222 00 00 248 30 00 193 00 00 018 22 30 #	27 09 43 * 60 30 00 56 00 00 50 42 00 53 15 00 *	
AMES A IOWA DALLAS D TEX AMES A IOWA AMES A IOWA AMES A IOWA	42 01 59 N 32 51 10 M 42 01 59 N 42 01 59 N 42 01 59 N	266 22 00 263 14 29 266 22 00 266 22 00 266 22 00	305 17 <b>2</b> 305 305 305	01 54 (3.00 01 54 12.50 01 54 48.00 01 55 01.00 01 56 09.02	182 44 24 018 52 24 * 176 00 00 175 28 12 170 06 36	42 48 18 33 00 00 * 36 12 00 34 25 12 26 16 48	
AMES A IOWA AMES A IOWA AMES A IOWA DAVIS CAL STOCTN A CAL	42 01 59 N 42 01 59 N 42 01 59 N 38 19 48 N 37 54 17 N	266 22 00 266 22 00 266 22 00 238 31 12 238 47 36	305 305 305	01 57 19:00 01 58 53:00 02 53 55:00 03 33 47:40 03 33 55:00	165 26 24 164 03 00 185 00 00 017 07 00 * 016 58 00 *	16 30 00 12 37 12 44 30 00 30 51 00 * 37 24 00 *	
ALBUO-GS MM DENVR A COLO ALBUO S NM WHITER A CAL ALBUO A NM	35 06 22 N 39 44 52 N 35 03 18 N 33 58 40 N 35 05 03 N	253 23 14 255 03 24 253 23 30 241 58 25 253 21 24	1565 1625 1618 149 1520	03 34 40.00 03 35 00.00 03 35 08.00 03 36 46.00 03 37 41.50	914 12 00 # 253 00 00 270 00 00 018 04 00 # 015 17 00 #	22 18 00 * 28 00 00 33 30 00 07 12 00 * 10 00 30 *	
OAVIS CAL TAIPEI TAIWN KAGOSHIMA J ALBUD A NM SHIRAZ IRAN	38 19 46 N 25 02 42 N 31 31 34 N 35 05 03 N 29 38 40 N	238 31 12 121 30 02 130 31 47 253 21 24 052 31 33	22 13 1520 1600	05 19 38.60 12 05 30.90 12 06 25.00 14 29 50.00 17 17 51.07	015 35 18 * 016 36 00 * 015 54 00 * 022 27 00 * 015 58 18 *	- 14 21 00 * 21 18 00 * 12 00 00 * 68 36 00 * - 08 40 00 *	
SHIRAZ IRAN SHIRAZ IRAN ATHENS GR ATHENS GR ATHENS GR	29 38 40 N 29 38 40 N 37 58 19 N 37 58 19 N 37 58 19 N	052 31 33 052 31 33 023 43 01 023 43 01 023 43 01	1600 160 110 110 110	17 08 59:26 17 09 07:42 18 45 46:40 18 46 27:00 18 47 06:40	015 33 06 * 016 03 42 * 231 45 00 013 56 00 * 263 54 00	- 02 37 00 * - 13 25 00 * 23 46 48 18 54 00 * 29 06 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	27 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	18 47 33.40 18 45 00.40 18 48 18.90 18 48 44.90 18 49 09.40	258 12 00 250 48 00 246 12 00 240 00 00 233 00 00	30 36 00 31 06 00 31 06 00 31 12 00 33 00 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	18 49 39 40 18 50 06 40 18 50 24 90 18 50 51 40 18 51 18 40	228 00 00 222 00 00 218 06 00 214 36 00 210 12 00	29 12 00 28 00 00 26 48 00 25 42 00 24 24 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR MAORID SP	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 40 24 30 N	023 43 01 023 43 01 023 43 01 023 43 01 356 18 43	110 110 110 110 655	18 51 45.40 18 52 30.90 18 53 06.90 18 53 43.40 20 27 00.00	207 48 00 202 00 00 198 18 00 194 48 00 013 55 00	23 06 00 20 18 00 18 30 00 15 12 00 21 00 00	•
HOUNSLOW ENG HOUNSLOW ENG MAORIO SP MAORIO SP MIL RAO MASS	51 19 00 N 51 19 00 N 40 24 30 N 40 24 30 N 42 37 03 N	359 47 00 359 47 00 356 18 43 356 18 43 288 30 28	655	20 27 28 • 00 20 29 35 • 00 20 29 40 • 00 20 32 15 • 00 22 03 31 • 10	C15 17 00 4 C16 10 00 4 O16 00 00 4 O16 55 00 6 O35 06 00	- 19 30 00 · - 15 00 00 ·	*
MIL RAD MASS MIL RAO MASS MIL RAO MASS	42 37 03 N 42 37 03 N 42 37 03 N	288 30 28 288 30 28 288 30 28	155	22 06 02.00 22 08 27.00 23 44 09.00	069 54 00 090 48 00 342 12 00	21 12 00 14 06 00 16 00 00	2020 2585 2070

STATION	LATITUOE	LONGITUDE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION#	SLANT RANGE IN KM
			25 AUG 1258	(CONT)			
MIL RAD MASS MIL RAD MASS MIL RAD MASS MIL RAD MASS CURACAO NWI	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 12 05 50 N	288 30 28 288 30 28 286 30 28 288 30 28 291 09 46	155 15° 15 · 16°	23 47 04 • 00 23 48 53 • 00 23 52 10 • 84 23 54 35 • 00 23 57 01 • 15	317 18 00 246 30 00 157 48 00 154 54 00 020 58 54 *	49 00 00 80 42 00 36 18 00 20 06 00 38 03 00 #	1 221 1 043 2495
		•	26 .UG 1958				
DANVILLE ILL BILOXI MISS OAYTON 8 O CLEVELND A O PUEBLA P MEX	40 08 57 N 30 23 27 N 39 50 14 N 41 29 46 N 19 03 00 N	272 22 26 271 08 28 275 44 03 278 12 16 261 49 00	189 7 249 223 2200	01 31 10.00 01 34 22.00 01 34 32.00 01 36 39.00 01 38 33.00	264 48 00 270 00 00 016 33 00 * 017 12 00 * 021 10 00 *	45 00 00 79 00 00 - 11 10 00 * - 26 48 00 * 09 49 00 *	
DENVR A COLO ALRUO-G5 NM ALMGOO-G5;NM CUL CY B CAL ALBUO S NM	39 44 52 N 35 06 22 N 32 52 22 N 33 57 11 N 35 03 18 N	255 03 24 253 05 14 254 03 05 241 37 26 253 23 30	1625 1565 1339 30 1618	03 13 03.00 03 13 37.00 03 13 55.00 03 14 09.00 03 14 14.00	266 15 00 014 11 00 * 013 53 54 * 003 42 00 * 270 00 00	28 30 00 24 06 00 <b>*</b> 29 06 00 <b>*</b> 22 36 00 <b>*</b> 37 00 00	
WHTIER A CAL ALMGDO-GS,NM ALMGDO-GS,NM EDW AF D CAL ALMGOO-GS,NM	33 58 40 N 32 52 22 N 32 52 22 N 34 56 43 N 32 52 22 N	241 58 25 254 03 05 254 03 05 242 04 58 254 03 05	149 1339 1339 785 1339	03 14 15.00 03 14 32.00 03 15 08.00 03 15 73.00 03 16 01.00	017 16 00 # 014 15 00 # 014 55 54 # 165 53 24 015 18 24 #	37 00 00 # 25 30 00 # 16 54 00 # 63 26 06 10 24 00 #	
SACMTO E CAL PUFBLA P MEX ALBUO S NM SACMTO E CAL MAUI HAWAII	38 32 55 N 19 03 00 N 35 03 18 N 38 32 55 N 20 42 36 N	238 14 51 261 49 00 253 23 30 235 14 51 203 44 23	15 2200 1618 15 3048	02 16 13.70 03 21 09.21 03 24 32.00 04 58 00.02 06 41 44.72	019 59 48 # 016 24 00 # 180 00 00 015 14 12 # 016 01 48 #	- 10 49 00 * - 03 00 00 * 08 00 00 - 10 19 00 * 18 07 00 *	
MAUI HAWAII MAUI HAWAII WAKE IS PAC KAGOSHIMA J TAIPEI TAIWN	20 42 36 N 20 42 36 N 19 17 12 N 31 31 34 N 25 02 42 N	203 44 23 203 44 23 166 39 12 139 31 47 121 30 C2	3048 3046 4 13 22	06 41 56.72 06 42 20.73 08 19 47.40 11 42 37.00 11 44 45.10	016 08 48 * 016 22 30 * 000 00 00 014 39 00 * 017 12 12 *		=
PASAY CY PI MIL RAO MASS MIL RAD MASS ATHENS GR ATHENS GR	14 33 42 N 42 37 03 N 42 37 03 N 37 58 19 N 37 58 19 N	120 59 30 268 30 28 268 30 28 023 43 01 023 43 01	155 155 110 110	11 48 16.70 14 35 38.97 14 36 36.86 18 24 06.20 18 24 42.20	152 00 00 198 36 00 190 48 00 285 00 00 276 48 00	60 00 00 06 42 00 16 42 00 26 48 00 29 18 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 42 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	18 25 08.70 18 25 27.20 18 25 53.70 18 26 20.70 18 26 47.70	269 06 00 264 42 00 257 24 00 250 48 00 243 00 00	31 48 00 32 48 00 33 48 00 34 00 00 34 42 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	18 27 14.20 18 27 41.70 15 28 27.20 18 28 53.23 18 29 20.73	236 00 00 229 06 00 218 36 00 214 06 00 209 46 00	34 42 00 33 30 00 30 42 00 29 06 00 26 54 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 27 58 19 N 37 58 19 N 37 56 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	18 29 47.70 18 30 14.70 18 30 41.70 18 31 17.70 18 31 45.70	205 42 00 202 54 00 199 00 00 195 12 00 192 54 00	25 36 00 24 00 00 21 42 00 19 18 00 18 00 00	
ATHENS GR MADRID SP MADRID SP S FERNNDO SP MADRID SP	37 58 19 N 40 24 30 N 40 24 30 N 36 27 42 N 40 24 30 N	023 43 01 355 18 43 356 18 43 353 47 42 356 18 43	110 655 655 30 655	18 32 39.20 20 05 45.00 20 09 05.00 20 10 43.42 20 10 45.00	014 00 00 015 55 00 017 07 18	* - 12 00 00 * - 18 39 00	*
CURACAO NWI	12 05 50 N	291 09 46	7	23 36 10.08	021 05 54	* <b>-</b> 24 50 0D	#
			27 AUG 19				
COLUMBUS O MEMPHIS TENN CLEVELND A O DAYTON B O EGLN AFB FLA	40 01 49 N 35 09 26 N 41 29 46 N 39 50 14 N 30 33 00 N	276 57 46 270 08 46 278 12 16 275 44 03 273 22 41	229 85 220 249	01 10 03.00 01 10 54.00 01 11 05.00 01 12 00.00 01 12 14.68	270 00 00 015 46 00 016 18 00	78 00 00 - 04 12 00 - 04 00 00	*
N CANTON A O BILOXI MISS CLEVELND A O MIL RAD MASS EGLN AFB FLA	40 55 54 N 30 23 27 N 41 29 46 N 42 37 03 N 30 <b>33</b> 00 N	278 12 16 288 30 28	366 7 220 155	01 12 27.00 01 12 33.00 01 13 04.00 01 13 31.58 01 13 35.04	270 00 00 201 00 00 226 42 00	88 00 D0 27 00 0D 16 <b>36</b> D0	

STATION	LATITUOE	LONGI TUOE EAST	HEIGHT TIME ( IN IN METERS HR MIN	OR	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			27 AUG 1958 (CONT)			
MIL RAO MASS ALMGOO-GS;NM OENVR A COLO ALMGDO-GS;NM ALBUO-GS;NM	42 37 03 N 32 52 22 N 39 44 52 N 32 52 22 N 35 06 22 N	288 30 28 254 03 05 255 03 24 254 03 05 253 23 14	155 01 54 1 1339 02 50 1 1625 02 50 4 1339 02 50 1 1565 02 51 3	27.00 012 30 00 * 46.80 270 00 00 54.00 012 49 24 *	18 30 00 41 24 00 # 31 00 00 39 24 00 # 29 00 00 #	
L ANGLS CAL ALMGOO-GS;NM SACMTO E CAL PORTLANO ORE WAKE IS PAC	33 59 41 N 32 52 22 N 38 32 55 N 45 29 19 N 19 17 12 N	241 45 43 254 03 05 238 14 51 237 22 27 166 39 12	61 02 51 4 1339 02 52 4 15 04 35 3 46 04 36 4 07 56 2	15.00 014 03 30 # 37.10 014 59 30 # 24.50 015 58 00 #	51 00 00 # 30 12 00 # 	
TAIPEI TAIWN KAGOSHIMA J ATHENS GR ATHENS GR ATHENS GR	25 02 42 N 31 31 34 N 37 58 19 N 37 58 19 N 37 58 19 N	121 30 02 130 31 47 023 43 01 023 43 01 023 43 01	22 11 21 4 13 11 27 1 110 18 02 1 110 18 03 1	23.00 017 38 00 * 23.20 272 36 00 59.70 261 36 00	36 57 00 # 43 00 00 # 30 24 00 37 30 00 39 06 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 18 03 110 18 04 110 18 04 110 18 05 110 18 05	20.20 236 06 00 47.20 228 36 00 14.70 221 06 00	39 48 00 39 24 00 37 54 00 36 24 00 34 06 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 53 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 13 06 110 18 06 110 18 07 110 18 07 110 18 08	44.20 203 42 00 11.20 200 42 00 47.20 195 24 00	31 24 00 29 12 00 27 18 00 24 18 00 22 06 00	
ATHENS GR ATHENS GR MAORIO SP MAORID SP MAORIO SP	37 58 19 N 37 58 19 N 40 24 30 N 40 24 30 N 40 24 30 N	023 43 01 023 43 01 356 18 45 356 18 43 356 18 43	110 18 08 110 18 09 655 19 43 655 19 48 6655 19 48 6	36.20 186 18 00 10.00 014 05 00 # 20.00 016 20 00 #	19 00 00 16 06 00 20 00 00 * - 14 00 00 * - 24 00 00 *	
PT RICO A WI PT RICO A WI PT RICO A WI PT RICO A WI PT RICO A WI	16 10 31 N 18 10 31 N 18 10 31 N 18 10 31 N 18 10 31 N	292 54 42 292 54 42 292 54 42 292 54 42 292 54 42	408 23 12 14 14 15 16 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	00.00 089 42 36 30.00 096 27 36 00.00 102 23 24	38 21 00 36 49 12 34 54 00 32 34 12 30 10 48	
PT RICO A WI PT RICO A WI PT RICO A WI PT RICO A WI PT RICO A WI	18 10 31 N 18 10 31 N 18 10 31 N 18 10 31 N 18 10 31 N	292 54 42 292 54 42 292 54 42 292 54 42 292 54 42	408 23 15 408 23 16 408 23 17 1408 23 17 1	00.00 118 46 48 30.00 121 37 12 00.00 124 09 00	27 50 24 23 14 24 20 56 24 18 48 00 16 45 00	
PT RICO A WI PT RICO A WI PT RICO A WI PT RICO A WI PT RICO A WI	18 10 31 N 16 10 31 N 18 10 31 N 18 10 31 N 18 10 31 N	292 54 42 292 54 42 292 54 42 292 54 42 292 54 42	408 23 16 408 23 18 408 23 19 408 23 20 6	30.00 130 00 36 00.00 131 33 36 30.00 132 58 12	14 49 48 12 56 24 11 09 36 09 26 24 27 50 24	
PT RICO A WI PT RICO A WI PT RICO A WI	18 10 31 N 18 10 31 N 18 10 31 N	792 54 42 292 54 42 <b>29</b> 2 54 42	408 23 20 24 25 21 26 26 27 21 28 AUG 1958	00.00 136 27 36	06 45 36 04 47 24 03 19 12	
EGLN AFB FLA EGLN AFB FLA PT RICO A WI N CANTON B O CLEVELNO A O	30 33 00 N 30 33 00 N 18 10 31 N 41 04 50 N 41 29 46 N	273 22 41 273 22 41 292 54 42 278 26 02 278 12 16	00 00 00 00 00 00 00 10 00 46 6	50.57 017 41 53 # 00.00 205 24 00 41.70 014 13 00 #	44 11 13 * 15 08 40 * 21 30 00 19 18 00 *	
CLEVELNO A O CLEVELNO A O ELTHRA B BWI ELTHRA B BWI ELTHRA B BWI	41 29 46 N 41 29 46 N 25 27 00 N 25 27 00 N 25 27 00 N	278 12 16 278 12 16 283 29 00 283 29 00 283 29 00	220 00 46 4 220 00 47 1 220 00 48 1 00 48 1 00 49 1 00 49 49 49 49 49 49 49 49 49 49 49 49 49	34.00 235 00 00 220 00 00 40.00 309 57 00 10.00 306 23 24	41 18 00 41 00 00 39 00 00 27 05 06 30 48 36	
BILOXI MISS ELTHRA B BWI PT RICO A WI ELTHRA B BWI PT RICO A WI	30 23 27 N 25 27 00 N 18 10 31 N 25 27 00 N 18 10 31 N	271 08 28 283 29 00 292 54 42 283 29 00 292 54 42	7 00 49 00 50 1 408 00 50 1 408 00 51 6	46.00 090 00 00 10.00 296 45 00 30.00 303 18 00 40.00 289 51 00	35 14 24 80 00 00 39 09 00 14 18 00 43 15 36 16 36 00	
PT RICO A WI ELTHRA B BWI PT RICO A WI ELTHRA B BWI PT RICO A WI	18 10 31 N 25 27 00 N 18 10 31 N 25 27 00 N 18 10 31 N	292 54 42 283 29 00 292 54 42 283 29 00 292 54 42	408 00 51 00 51 408 00 52 00 52 408 00 52	30.00 307 00 00 40.00 271 36 36 00.00 303 12 00 10.00 259 29 24	19 00 00 50 15 36 21 12 00 51 45 00 23 24 00	

STATION	LATITUDE	LONGITUOE .	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
		;	28 AUG 1958	(CONT)			
PT RICO A WI PT RICO A WI GRO BHMA RWI PT RICO A WI GRO BHMA BWI	18 10 31 N 18 10 31 N 26 36 34 N 18 10 31 N 26 36 34 N	292 54 42 292 54 42 281 39 06 292 54 42 281 39 06	408 408 408	00 53 00.00 00 53 30.00 00 53 40.00 00 54 00.00 00 54 10.00	284 06 00 178 42 00 204 26 24 273 00 00 007 30 00	25 30 00 27 36 00 48 51 48 27 42 00 44 42 00	
GRO BHMA BWI CURACAO NWI GRO BHMA BWI PT RICO A WI ELTHRA B SWI	26 36 34 N 12 05 50 N 26 36 34 N 18 10 31 N 25 27 00 N	281 39 06 291 09 46 281 39 06 292 54 42 283 29 00	7 408	00 54 40.00 00 54 44.06 00 55 10.00 00 55 30.00 00 55 40.00	002 17 24 014 49 48 * 008 00 00 152 54 00 195 00 C0	40 42 00 25 01 59 # 36 38 24 31 18 00 35 56 06	
GRO BHMA BWI PT RICO A WI GRD 8HMA 8WI PT RICO A WI CURACAO NWI	26 36 34 N 18 10 31 N 26 36 34 N 18 10 31 N 12 05 50 N	281 39 06 292 54 42 281 39 06 292 54 42 291 09 46	408 406 7	00 55 40.00 00 56 00.00 00 56 10.00 00 56 30.00 00 56 35.42	004 48 36 156 12 00 002 16 48 239 36 00 015 35 36 *	32 52 48 31 30 00 29 51 35 11 06 00 04 59 00 *	
GRD BHMA BWI GRO BHMA PWI PT RICO A WI PT RICO A WI ELTHRA B BWI	26 36 34 N 26 36 34 N 18 10 31 N 18 10 31 N 25 27 00 N	281 39 06 281 39 06 292 54 42 292 54 42 283 29 00	408 408	00 56 40.00 00 57 10.00 00 57 30.00 00 58 00.00 00 58 10.00	000 10 12 008 13 12 227 42 00 222 12 00 181 19 48	26 49 48 24 03 36 31 00 00 26 00 00 21 28 30	
PT RICO A WI ELTHRA 8 BWI PT RICO A WI ELTHRA B BWI CURACAO NWI	18 10 31 N 25 27 00 N 18 10 31 N 25 27 00 N 12 05 50 N	292 54 42 283 29 00 292 54 42 283 29 00 291 09 46	408 408 7	00 50 30.00 00 58 40.00 00 59 00.00 00 59 10.00 00 59 18.90	227 24 00 179 45 36 222 54 00 178 15 00 016 34 30 *	26 54 00 18 53 42 25 36 00 16 53 24 - 26 46 00 *	
ELTHRA B BWI ELTHRA B BWI HUANCAYO PER HUANCAYO PER ALMGROO A NM	25 27 00 N 25 27 00 N 12 01 27 S 12 01 27 S 32 52 23 N	283 29 00 283 29 00 284 40 28 264 40 28 254 02 57	3476 3476 1335	00 59 40.00 01 00 10.00 01 00 18.00 01 02 48.00 02 28 58.00	177 00 36 175 24 00 018 30 00 * 019 33 00 * 013 44 12 *	14 39 00 11 48 36 46 00 00 * 17 00 00 * 37 36 00 *	
ALBUQ-GS NM ALMGROO A NM ALBUO S NM ALMGROO A NM ALBUQ A NM	35 06 22 N 32 52 23 N 35 03 18 N 32 52 23 N 35 05 03 N	253 23 14 254 02 57 253 23 30 254 02 57 253 21 24	1565 1335 1618 1335 1520	02 29 08.00 02 29 18.00 02 29 26.00 02 30 37.00 02 30 48.00	014 30 00 * 014 00 00 * 270 00 00 015 16 24 * 015 46 00 *	28 36 00 * 34 54 00 * 48 30 00 18 54 00 * 98 00 00 *	•
ALMGRDO A NM ORGN PASS NM ORGN PASS NM ORGN PASS NM ALMGROO A NM	32 52 23 N 32 25 24 N 32 25 24 N 32 25 24 N 32 52 23 N	254 02 57 253 26 51 253 26 51 253 26 51 254 02 57	1335 1651 1651 1651 1335	02 30 55.00 02 30 56.44 02 31 00.76 02 31 04.71 02 31 22.00	015 29 24 * C15 30 00 * C15 33 24 * O15 36 18 * O15 47 30 *	17 25 00 1 16 28 59 1 15 32 00 1	+ + *
MAUI HAWAII MAUI HAWAII MAUI HAWAII SHIRAZ IRAN SHIRAZ IRAN	20 42 36 N 20 42 36 N 20 42 36 N 29 38 40 N 29 38 40 N	203 44 23 203 44 23 203 44 23 052 31 33 052 31 33	3048 3048 3044 1600 1600	05 57 35.85 05 55 18.40 05 58 31.87 16 00 32.39 16 01 14.13	017 11 30 * C17 31 48 * C17 37 05 * C15 15 24 * C16 28 42 *	- 04 09 00 4 - 06 58 01 4 10 52 00 4	* *
SHIRAZ IRAN	29 38 40 N	052 31 33	1600	16 01 14.50	C15 41 18 *	C1 59 00 :	*
5			29 AUG 19				
MIL RAO MASS MIL RAI, MASS HUANCAYO PER AREOUIPA PER HUANCAYO PER	42 37 03 N 42 37 03 N 12 01 27 S 16 23 05 S 12 01 27 S	288 30 28 288 30 28 284 40 28 288 27 55 284 40 23	155 155 3476 2377 3476	00 20 47.61 00 26 47.90 00 36 54.00 00 39 31.68 00 39 48.00	286 30 00 218 48 00 018 53 00 4 019 01 24 4 019 35 00 4	25 03 00	*
ALMGROO B NM OK CY A OKLA SACMTO E CAL MAUI HAWAII MAUI HAWAII	32 54 49 N 35 33 50 N 38 32 55 N 20 42 36 N 20 42 36 N	254 02 54 262 29 20 238 14 51 203 44 23 203 44 23	1300 360 15 3048 3048	02 06 26.78 02 12 55.00 03 48 41.10 05 33 45.93 05 34 05.92		= 21 05 00 = 08 13 00 = 03 59 00	* *
MAUI HAWAII SHIRAZ IRAN SHIRAZ IRAN SHIRAZ IRAN ADLAID C AUS	20 42 36 N 29 38 40 N 29 38 40 N 29 38 40 N 34 44 00 S	052 <b>3</b> 1 33 052 31 33	3048 1600 1600 1600	05 34 18 • 38 15 38 40 • 43 15 39 35 • 84 15 40 01 • 41 19 47 42 • 00	016 28 54 016 53 54 017 04 18	* - 08 29 00 * - 18 13 00 * - 22 09 00	* *
			30,AUG 1	958			
SSLVOR A 8WI SSLVDR A 8WI GR TRK A BWI SSLVDR A BWI GR TRK A 8WI	24 07 23 N 24 07 23 N 21 25 59 N 24 07 23 N 21 25 59 N	285 32 53 288 51 16 285 32 53		00 03 00.00 00 03 30.00 00 04 00.00 00 04 00.00 00 04 30.00	268 28 12 284 44 06 246 57 36	61 20 24 65 26 24 51 53 24 67 04 12 55 15 00	

STATION	LATITUOE		HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OP DECLINATION*	SLANT PANGE IN KM
		3	0 AUG 1958	(CONT)			•
SSLVDR A 8WI GR TPK A BWI SSLVOP A BWI GR TRK A BWI SSLVOP A BWI	24 07 23 N 21 25 59 N 24 07 23 N 21 25 59 N 24 07 23 N	285 32 53 288 51 16 285 32 53 288 51 16 285 32 53		00 04 30.00 00 05 00.00 00 05 00.00 00 05 30.00 00 05 30.00	225 44 42 253 56 24 209 40 30 239 13 30 196 34 12	66 11 24 56 58 12 61 59 24 57 05 24 57 20 42	
GR TRK A BWI SSLVOR A BWI GR TRK A BWI SSLVOR A PWI GP TRK A BWI	21 25 59 N 24 07 23 N 21 25 59 N 24 07 23 N 21 25 59 N	286 51 16 285 32 53 288 51 16 285 32 53 -288 51 16		00 94 00.00 00 06 00.00 00 96 30.00 00 96 30.00 00 97 00.00	225 48 54 191 14 24 714 48 36 185 41 42 206 14 24	55 13 12 51 53 24 52 21 54 46 52 12 48 44 43	
SSLVDP A 8WI GR TRK A 8WI GR TRK A 8WI GR TRK A 8WI GP TRK A 8WI	24 07 23 N 21 25 59 N 21 25 59 N 21 25 59 N 21 25 59 N	285 32 53 288 51 16 288 51 16 288 51 16 288 51 16		00 07 00•00 00 07 30•00 00 08 00•00 00 08 30•00 00 09 00•00	182 10 12 199 53 06 194 28 30 190 03 54 186 32 24	42 18 54 45 07 30 41 15 00 37 16 12 33 41 24	
GR TRK A BWI GR TPK A BWI HUANCAYO PER GR TRK A BWI GR TRK A BWI	21 25 59 N 21 25 59 N 12 01 27 S 21 25 59 N 21 25 59 N	288 51 16 288 51 16 284 40 28 288 51 16 288 51 16	3476	00 09 30.00 00 10 00.00 00 10 18.00 00 10 30.00 00 11 00.00	183 50 06 181 40 12 019 04 00 # 179 48 18 178 16 48	3C 25 12 27 14 24 52 30 00 * 24 32 24 21 51 54	
GP TRK A BWI GP TRK A BWI GR TRK A BWI HUANCAYO PIR APEGUIPA PER	21 25 59 N 21 25 59 N 21 25 59 N 12 01 27 5 16 23 05 S	288 51 16 288 51 16 288 51 16 254 40 28 288 27 55	3476 2377	00 11 30.00 00 12 00.00 00 12 30.00 00 14 24.00 00 15 14.11	176 47 06 175 36 54 174 36 36 024 14 00 * 019 34 23 *	19 24 00 17 09 54 15 04 12 14 00 00 * 19 13 59 *	
L'APLAT C ARG LAPLAT C APG OALLAS P TEX PUEBLA P MEX S AN RAFB TX	34 54 26 S 34 54 26 S 32 51 10 N 19 03 00 N 29 32 06 N	302 05 30 302 05 30 263 14 29 261 49 00 261 42 33	172 2200 232	00 18 30.30 00 19 43.10 01 41 39.00 01 45 42.30 01 49 01.70	017 55 46 * 017 49 27 * 013 55 00 * 015 51 24 * 017 32 00 *	30 08 00 ** 22 21 18 ** 18 39 20 ** 26 00 00 ** - 38 30 00 **	
SACMTO E CAL UNION JOHSBG PRET B S AF PPET B S AF PPET B S AF	38 32 55 N 26 10 55 S 25 43 43 S 25 43 43 S 25 43 43 S	238 14 51 028 04 30 028 12 42 028 12 42 028 12 42	15 1806 1311 1311 1311	03 23 42.00 17 08 09.50 17 08 09.80 17 08 44.40 17 10 27.30	015 01 42 * 029 44 00 * 020 43 54 * 020 56 30 * 021 32 00 *	- 07 52 00 + 15 54 00 + 15 42 00 + 10 00 00 + 10 00 00 +	
UNION JOHSBG AOLAIO C FUS SJUAN-GS APG	26 10 55 S 34 44 00 S 31 30 37 S	028 04 30 138 40 00 291 22 46	1806 <b>6</b> 50	17 10 41 80 19 24 42 00 23 54 17 85	021 35 00 * 009 40 00 * 020 26 00 *	- 05 00 00 4 - 23 00 00 4 11 36 00 4	¢ .
			31 AUG 19				
PUEBLA P MEX MAUI HAWAII ADLAIO C AUS UNION JOHSBG PRET B S AF	19 03 00 V 20 42 36 N 34 44 00 5 26 10 55 5 25 43 43 5	261 49 00 203 44 23 138 40 00 028 04 30 028 12 42	2200 3048 1806 1311	01 21 24.80 66 24 52.12 10 04 06.00 18 26 24.00 18 27 24.20	016 16 00 # 014 04 54 # 021 50 00 # 017 12 00 # 017 28 00 #	- 04 42 00 - 14 30 00 - 21 48 00	* *
UNION JOHSBG JOHBG R S AF LAPLAT C ARG LAPLAT C ARG SJUAN-GS ARG	26 10 55 \$ 26 11 42 \$ 34 54 26 5 34 54 26 5 31 30 37 \$	028 C4 30 028 09 25 302 05 30 302 05 30 291 22 46	1806 1708 650	16 27 25.20 18 30 24.60 23 24 13.90 23 25 03.90 23 26 10.00	017 29 00 * 019 50 00 * 017 53 20 * 018 06 10 * 020 07 00 *	73 30 00 40 02 00 36 23 36	* * *
LAPLAT C ARG SJUAN-GS ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	34 54 26 S 31 30 37 S 34 54 26 S 34 54 26 S 34 54 26 S	302 05 30 291 22 46 302 05 30 302 05 30 302 05 30	650	23 26 20 60 23 27 31 00 23 27 38 20 23 28 52 20 23 29 57 30	018 25 58 4 020 32 00 4 018 50 29 6 019 16 07 6 019 43 49	12 18 00 21 22 24 11 30 36	* *
LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG SJUAN-GS ARG	34 54 26 S 34 54 26 S 34 54 26 S 31 30 37 S	302 05 30 302 05 30	650	23 31 08.20 23 31 51.90 23 33 09.80 23 54 18.00	021 45 21	• - 19 17 30 • - 32 33 12	*
			1 SEP 1				
LAPLAT C APG LAPLAT C ARG LAPLAT C ARG SJUAN-GS ARG LAPLAT C ARG	34 54 26 S 34 54 26 S 31 30 37 S	302 05 30 302 05 30 291 22 46	650	01 10 38.30 01 11 24.10 01 12 45.40 01 13 34.00 01 13 59.20	015 48 55 015 49 05 017 03 00	* - 02 59 48 + - 14 00 12 + 45 30 00	* *
AREQUIPA PER AREQUIPA PER MAUI HAWAII MAUI HAWAII MAUI HAWAII		288 27 55 203 44 23 203 44 23	2377 2377 3048 3048 3048	01 15 20.44 01 15 36.25 05 59 40.12 05 59 47.69 06 00 23.86	018 11 12 014 37 36 014 40 00	* = 28 21 00 * 19 04 59 * 20 16 00	*

STATION	L AT I TUOE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			1 SEP 1958	(CONT)			
KAGOSHIMA J KAGOSHIMA J KAGOSHIMA J JOHBG E S AF PRET B S AF	31 31 34 N 31 31 34 N 31 31 34 N 26 08 00 S 25 43 43 S	130 31 47 130 31 47 130 31 47 028 01 00 028 12 42	13 13 13 1672 1311	10 57 07.00 10 58 25.00 11 03 44.00 17 51 38.40 17 56 26.90	013 28 00 * 013 54 00 * 015 19 00 * 018 01 00 * 0:6 55 24 *	- 01 00 00 # 10 00 00 # 40 00 00 # - 30 24 00 # 10 36 00 #	
PRET 9 S AF JOHBG C S AF JOHBG B S AF JOHBG C S AF CPTWN A S AF	25 43 43 S 26 07 00 S 26 11 42 S 26 07 00 S 33 56 00 S	028 12 42 028 00 00 028 08 25 028 00 00 018 28 37	1311 1615 1708 1615 7	17 59 29.80 17 59 37.80 18 00 04.00 18 00 26.20 18 01 28.90	017 56 00 * 018 05 00 * 018 14 00 * 018 29 00 * 021 04 00 *	- 30 12 00 * - 30 18 00 * - 36 48 00 * - 42 18 00 * - 17 18 00 *	
PRET B S AF PRET B S AF CPTWN A S AF LAPLAT C ARG LAPLAT C ARG	25 43 43 S 25 43 43 S 33 56 00 S 34 54 26 S 34 54 26 S	028 12 42 028 12 42 018 28 37 302 05 30 302 05 30	1311 1311 7	18 04 50.60 19 46 18.00 22 56 25.90 22 59 30.00	019 42 00 * 000 21 54 * 015 30 00 * 016 03 41 * 018 55 12 *	- 62 36 00 * - 72 22 00 * - 62 54 00 * 41 52 30 * 26 01 42 *	
LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S	302 05 30 302 05 30 302 05 30 302 05 30 302 05 30		23 01 50.90 23 02 20.50 23 02 43.00 23 04 08.50 23 04 50.30	019 47 59 * 020 00 41 * 020 11 05 * 020 56 31 * 021 21 47 *	07 46 42 # 03 12 12 # - 00 24 24 # - 14 35 24 # - 20 01 54 #	
LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S	302 05 30 302 05 30 302 05 30 302 05 30		23 04 57.30 23 05 08.00 23 05 46.10 23 77 39.80	021 26 12 * 021 32 56 * 021 58 40 * 023 17 10 *	- 22 01 48 * - 23 38 06 * - 28 37 00 * - 39 20 18 *	
			2 SEP 1958	3			
HUANCAYO PER HUANCAYO PER LAPLAT C ARG AREOUIPA PER LAPLAT C ARG	12 01 27 S 12 01 27 S 34 54 26 S 16 23 05 S 34 54 26 S	284 40 28 284 40 28 302 05 30 288 27 55 302 05 30	3476 3476 2377	00 38 19.09 00 40 19.00 00 42 54.30 00 45 01.72 00 45 10.30	016 18 00 # 016 53 00 # 015 48 40 # 017 32 46 # 015 53 41 #	- 20 00 00 * - 47 00 00 * - 64 36 48 * - 76 22 01 * - 14 17 24 *	
SJUAN-GS ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	31 30 37 5 34 54 26 5 34 54 26 5 34 54 26 5 34 54 26 5	291 22 46 302 05 30 302 05 30 302 05 30 302 05 30	650	00 45 20.00 00 46 40.10 00 47 46.40 00 47 54.40 00 46 02.70	017 33 00 * 015 53 01 * 015 49 11 * 015 48 32 * 015 46 50 *	- 37 24 00 * - 30 58 24 * - 45 09 54 * - 46 56 06 * - 46 45 18 *	
LAPLAT C ARG LAPLAT C ARG SACMTO E CAL SACMTO E CAL ADLAIO C AUS	34 54 26 S 34 54 26 S 38 32 55 N 38 32 55 N 34 44 00 S	302 05 30 302 05 30 238 14 51 238 14 51 138 40 00	15 15	00 49 05.60 00 49 32.70 93 46 47.60 03 49 45.90 09 09 54.00	015 33 58 * 015 22 06 * 014 00 15 * 014 47 27 * 022 02 00 *	- 62 32 36 4 - 65 10 12 * - 16 40 60 * - 30 55 60 * - 14 30 00 *	
ADLAID C AUS KAGOSHIMA J KAGOSHIMA J KAGOSHIMA J KAGOSHIMA J	34 44 00 S 31 31 34 M 31 31 34 N 31 31 34 N 31 31 34 N	138 40 00 130 31 47 130 31 47 130 31 47 130 31 47	13 13 13	09 54 22.02 10 27 46.00 10 29 24.00 10 33 58.00 10 35 27.00	011 43 00 * 012 46 00 * 013 26 00 * 014 57 00 * 015 18 00 *	00 47 00 * 10 00 00 00 00 00 00 00 00 00 00 00 00	
KAGOSHIMA J PERTH AUS PERTH AUS PERTH AUS PERTH AUS	31 31 34 N 32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S	130 31 47 115 51 10 115 51 10 115 51 10 115 51 10	13 5 5 5	10 37 30.00 10 43 56.10 10 44 45.40 10 45 56.90 10 47 08.60	015 57 00 * 033 00 00 039 00 00 00 00 00 00 00 00 00 00 00 00 00	- 50 00 00 # 20 18 00 22 12 00 26 30 00 28 00 00	
PERTH AUS PERTH AUS WOOMER AUS PERTH AUS WOOMER AUS	32 00 07 S 32 00 07 S 31 06 06 S 32 00 07 S 31 06 06 S	115 51 10 115 51 10 136 46 54 115 51 10 136 46 54	5 5 162 5 162	10 48 18.80 10 50 05.91 10 51 10.37 10 52 08.80 10 52 08.83	074 48 00 017 43 48 # 018 21 24 # 112 27 00 011 15 00 #	- 50 55 <b>0</b> 0 *	
WOOMER AUS WOOMER AUS PERTH AUS PERTH AUS PERTH AUS	31 06 06 S 31 06 06 S 32 00 07 S 32 00 07 S 32 00 07 S	136 46 54 136 46 54 115 51 10 115 51 10 115 51 10	162 162 5 5	10 53 53.88 10 55 13.72 10 55 14.10 12 27 00.13 12 27 00.92	C22 40 00 * 012 55 48 * 129 18 00 311 30 00 311 18 00		
PERTH AUS PERTH AUS PERTH AUS PERTH AUS PERTH AUS	32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S	115 51 10 115 51 10 115 51 10 115 51 10 115 51 10	. 5 5 5 5	12 27 28.00 12 30 11.60 12 30 57.80 12 31 07.40 12 33 59.90	310 C6 CO 285 30 CO 263 24 CO 264 24 CO 188 48 CO	31 00 00 54 06 00 59 30 00 60 48 00 49 30 00	
PERTH AUS PERTH AUS WMERA MT AUS OLFSFTN S AF CPTWN A S AF	32 00 07 5 32 00 07 5 31 06 09 5 25 57 33 5 33 56 00 5	115 51 10 115 51 10 136 46 59 028 14 53 018 28 37	5 160 1544 7	12 35 39.20 12 35 55.68 12 37 33.60 17 31 19.80 19 14 30.20	173 12 00 172 06 00 165 12 00 018 40 18 016 03 00		

•		LONGITUDE	HEIGHT IN	TIME GMT	AZIMUTH	ELEVATION	
STATION	LATITUDE	EAST	METERS	IN HR MIN SEC	OR RGT ASCEN *	OR DECLINATION*	ı
			2 SEP 195	8 (CONT)			
PRET B S AF	25 43 43 S	028 12 42	1311	19 14 30.42	014 27 00 "		
CPTWN A S AF LAPLAT C ARG	25 43 43 S 33 56 00 S	028 12 42 018 28 37	1311	19 14 30.70 19 17 42.30	014 27 00 * 014 27 00 *	- 30 42 00 * - 30 42 00 *	
GR TRK B BWI	34 54 26 S 21 43 00 N	302 05 30 288 45 00		23 36 46 10 23 58 30 14	016 12 00 * 021 35 42 * 264 17 06	- 63 35 00 * - 19 33 12 *	
GR TRK B BWI GR TRK B BWI	21 43 00 N 21 43 00 N	288 45 00		23 59 00.00	259 17 24	20 23 24	
	21 43 00 14	288 45 00		23 59 30.00	254 23 16	20 50 24 21 21 00	
GR TRK B BWI	21 43 00 N	288 45 00	3 SEP 195				
GR TRK B BWI CURACAO NWI	21 43 00 N 12 05 50 N	288 45 00 291 C9 46		00 00 00.00	249 32 24 244 25 12	21 23 06 21 26 42	
CURACAO NWI HUANCAYO PER	12 05 50 S 12 01 27 S	291 09 46 284 40 28	7 12 3476	00 03 50.66 00 04 46.64	014 10 42 * 014 23 30 *	= 19 28 00 # = 27 26 00 #	
HUANCAYO PER	12 01 27 S	284 40 28	3476	00 08 21.00 60 10 35.00	016 27 00 *	06 30 00 #	
AREOUIPA PER SJUAN-GS ARG	16 23 05 S 31 30 37 S	286 27 55 291 22 46	2377 650	00 13 44 57 00 13 53 00	017 13 00 # C17 16 48 #	- 28 CO OO # - 53 30 OO #	
AREOUIPA PER SJUAN-GS ARG	16 23 05 S 31 30 37 S	288 27 55 291 22 46	2377 650	00 14 20.54	017 09 00 * 017 33 47 *	04 36 00 <b>*</b> <b>=</b> 59 26 00 <b>*</b>	
SJUAN-GS ARG SJUAN-GS ARG	31 30 37 S	291 22 46	650	02 01 12.00	017 33 00 *	- 11 30 00 *	
WOOMER AUS WOOMER AUS	31 30 37 S 31 06 06 S	291 22 46 136 46 54	650 162	02 02 13.00 10 18 16.70	014 11 00 * 013 53 00 * 017 29 30 *	- 42 54 00 * - 50 18 00 *	
WOOMER AUS	31 06 06 S 31 06 06 S	136 46 54 136 46 54	162 162	10 19 21.50 10 22 22.08	017 29 30 * 017 35 30 * 019 35 12 *	- 00 07 58 * - 14 41 00 *	
WOOMER AUS WOOMER AUS	31 06 06 S 31 06 06 S	136 46 54	162	10 22 37.63	019 53 36 *	<b>-</b> 50 25 00 <b>*</b>	
PERTH AUS PERTH AUS	32 00 07 S 32 00 07 S	136 46 54 115 51 10	162 5	10 23 10.46 11 57 24.60	020 10 32 * 324 07 00	= 53 28 00 * = 56 11 00 *	
PERTH AUS	32 00 07 5	115 51 10 115 51 10	5 5	11 58 31.70 12 03 43.60	321 42 00 192 35 00	26 21 00 34 59 00 68 51 00	
PERTH AUS WOOMER AUS	32 00 07 S 31 06 06 S	115 51 10 136 46 54	5	12 05 20.00	169 26 00	48 36 00	
WOOMER AUS PERTH AUS	31 06 06 S 32 00 07 S	136 46 54 115 51 10	162 162	12 05 48.19 12 06 04.60	021 03 73 * 019 21 06 *	= 43 59 00 * = 46 12 00 *	
PRET E S AF	25 43 43 S	028 12 42	5 1311	12 06 34.80 16 55 34.60	163 33 00 015 50 00 *	36 20 00 41 54 00 #	
PRET S S AF JOHBG B S AF	25 43 43 S 26 11 42 S	028 12 42 028 08 25	1311 1708	17 00 46.10	C18 34 00 *	- 03 00 00 *	
OLFSFTN S AF PRET B S AF	25 57 33 S 25 43 43 S	028 14 53 028 12 42	1544	17 02 34.00 17 03 05.00	C19 34 00 * C19 13 00 *	- 25 CO OO * - 19 30 CO *	
PRET 8 S AF	25 43 43 S	028 12 42	1311 1311	17 04 11.80 17 07 01.40	020 44 00 # 023 17 00 #	- 44 42 00 * - 57 30 00 *	
PRET B S AF	25 43 43 5 26 11 42 5	028 12 42 028 08 25	1311 1708	18 45 53.00	014 22 00 *	<del>-</del> 37 12 00 *	
PRET B S AF	25 43 43 S 26 11 42 S	028 12 42 028 08 25	1311 1708	18 46 25.50 18 47 45.60	014 16 36 * 013 52 00 *	- 41 54 00 * - 54 18 CO *	
PRET B S AF	25 43 43 S	028 12 42	1311	18 48 38.50 18 51 56.60	013 39 36 * 009 18 00 *	- 60 12 00 * - 74 36 00 *	
AREQUIPA PER AREQUIPA PER	16 23 05 S 16 23 05 S	288 27 55 288 27 55	2377 2377	23 41 59•13 23 42 14•66	017 05 48 *	- 16 22 00 *	
			4 SEP 1958		017 12 12 *	- 20 24 00 *	
WASH WLSN DC PERTH AUS	38 50 00 N	282 59 24		10 01 00.on	010 53 00 #		
PERTH AUS PERTH AUS	32 00 07 S 32 00 07 S 32 00 07 S	115 51 10	· 5 · 5	11 25 13.40 11 26 00.00	335 48 00 335 50 00	49 36 00 * 15 08 00	
PERTH AUS	32 00 07 S	115 51 10 115 51 10	5 5	11 27 07.70 11 27 18.50	335 53 00 335 58 00	18 24 00 25 23 00	
PERTH AUS PERTH AUS	32 00 07 S 32 00 07 S	115 51 10	5	11 27 58.70	336 01 00	26 32 00	
PERTH AUS PERTH AUS	32 00 07 S 32 00 07 S	115 51 10 115 51 10 115 51 10	5	11 28 54.60 11 30 00.00	336 14 00 336 31 00	30 49 00 38 52 00 48 40 00	
PERTH AUS	32 00 07 S	115 51 10	5 5	11 35 13.40 11 36 59.60	152 38 00 152 30 00	51 32 00 32 59 00	
LAPLAT C ARG	34 54 26 S 34 54 26 S	302 05 30 302 05 30		23 11 12.00	015 42 04 *	32 36 48 *	
LAPLAT C ARG	34 54 26 S 34 54 26 S	302 05 30 302 05 30		23 14 45 10 23 15 01 20	016 20 19 * 016 24 09 *	13 36 06 * 11 29 36 *	
LAPLAT C ARG	34 54 26 S	302 05 30		23 16 20.50 23 16 40.20	016 42 01 * 016 46 37 *	- 00 29 48 * - 04 27 06 *	
LAPLAT C ARG LAPLAT C ARG	34 54 26 S 34 54 26 S	302 05 30 302 05 30		23 17 12.00 23 17 52.30	016 55 06 *	- 10 53 54 *	
LAPLAT C ARG	34 54 26 S 34 54 26 S 34 54 26 S	302 05 30 302 05 30	•	23 18 24 40 23 19 05 50	017 08 35 * 017 20 50 * 017 41 21 *	- 20 36 06 * - 28 03 42 *	
LAPLAT C ARG	34 54 26 5	302 05 30		23 20 33.40	018 56 52 *	- 38 46 30 * - 60 15 48 *	
LAPLAT C ARG	• • • •	302 05 30 302 05 30		23 21 27.80 23 21 30.50	020 25 54 * 020 32 35 *	= 69 13 54 *	
						<b>-</b> 69 36 30 *	

SLANT RANGE IN KM

		LONGITUOE	HEIGHT IN	TIME GMT	AZIMUTH OR	ELEVATION SLANT OR RANGE
STATION	LATITUOE	EAST		HR MIN SEC	RGT ASCEN #	OECLINATION* IN KM
			4 SEP 1958	(CONT)		
LAPLAT C ARG	34 54 26 S 34 54 26 S	302 05 30 302 05 30		23 22 21.10 23 23 48.20	022 31 56 <b>*</b> 001 13 40 <b>*</b>	- 72 46 12 * - 69 03 24 *
			5 SEP 1958			
LAPLAT C ARG PERTH AUS PERTH AUS PERTH AUS PERTH AUS	34 54 26 S 32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S	302 05 30 115 51 10 115 51 10 115 51 10 115 51 10	5 5 5 5	08 12 23.70 10 54 51.20 10 55 11.40 10 56 40.30 10 56 44.30	007 09 15 * 345 48 00 346 13 00 349 12 00 349 12 00	- 00 13 54 * 17 18 00 19 06 00 27 30 00 28 48 00
PERTH AUS PERTH AUS PERTH AUS PERTH AUS PERTH AUS	32 00 07 S 32 00 07 S	115 51 10 115 51 10 115 51 10 115 51 10 115 51 10	5 5 5 5	10 57 45.00 10 58 55.20 11 01 02.60 11 03 12.30 11 03 44.30	352 00 00 357 42 00 031 54 00 117 24 00 126 12 00	35 24 00 44 48 00 67 48 00 61 1? 00 54 42 00
PERTH AUS PERTH AUS PERTH AUS AOLAIO C AUS PERTH AUS	32 00 07 5 32 00 07 5 32 00 07 5 34 44 00 5 32 00 07 5	115 51 10 115 51 10 115 51 10 138 40 00 115 51 10	5 5 5	11 04 33.20 11 05 32.40 11 06 26.00 11 06 55.00 11 07 03.30	134 00 00 137 24 00 142 00 00 014 00 00 * 144 00 00	45 42 00 36 24 00 29 06 00 60 00 00 # 24 35 00
PERTH AUS PERTH AUS PERTH AUS PERTH AUS PERTH AUS	32 00 07 5 32 00 07 5 32 00 07 5 32 00 07 5 32 00 07 5	115 51 10 115 51 10 115 51 10 115 51 10 115 51 10	5 5 5 5 5 5	11 07 11,60 11 08 29.60 11 09 15.20 12 42 54.80 12 43 11.00	144 06 00 146 18 00 147 06 00 264 54 00 262 36 00	23 42 00 15 47 00 11 36 00 21 54 00 22 49 00
PERTH AUS PERTH AUS PERTH AUS PERTH AUS PERTH AUS	32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S	115 51 10 115 51 10 115 51 10 115 51 10 115 51 10	5 5 5 5 5	12 43 12.90 12 43 38.90 12 45 08.50 12 45 31.50 12 46 59.30	252 36 00 258 36 00 243 24 00 239 18 00 222 00 00	23 00 00 24 12 00 27 00 00 27 06 00 26 48 00
PERTH AUS PERTH AUS PERTH AUS PERTH AUS PERTH AUS	32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S	115 51 10 115 51 10 115 51 10 115 51 10 115 51 10	5 5 5 5 5	12 47 35.80 12 48 10.40 12 49 50.90 12 51 16.20 12 52 01.90	215 18 00 209 18 00 193 42 00 183 12 00 179 00 00	25 54 00 24 24 00 19 12 00 13 54 00 11 24 00
MELBRNE AUS LAPLAT C ARG	37 49 54 5 34 54 26 \$	144 55 24 302 05 30	29	19 21 25.00 22 49 16.10	180 00 00 020 04 32 #	57 0C 00 - 52 52 00 *
			6 SEP 195	5.8		
ADLAIO C AUS MELBRNE AUS ADLAIO C AUS PPET E S AF LAPLAT C ARG	34 44 00 S 37 49 54 S 34 44 00 S 25 43 43 S 34 54 26 S	138 40 00 144 58 24 138 40 00 028 12 42 302 05 30	29 1311	10 33 24.00 10 40 09.96 11 06 55.29 17 14 11.20 22 15 12.00	014 57 00 ** 180 00 00 014 00 00 ** 015 38 00 ** 019 15 27 **	20 00 00 # - 60 00 00 # - 66 00 00 #
LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S	302 05 30 302 05 30 302 05 30 302 05 30 302 05 30		22 16 21.00 22 18 06.50 22 19 19.10 23 57 29.00 23 59 09.60	019 56 58 * 021 42 29 * 022 58 37 * 014 17 54 * 013 56 20 *	- 49 36 36 # - 53 04 30 # - 27 52 00 #
LAPLAT C ARG	34 54 26 S	302 05 30		23 59 43.20	013 44 24 4	- 51 14 36 *
LAPLAT C ARG	34 54 <b>2</b> 6 5	302 05 30	7 SEP 19	58 00 01 16.50	012 37 25	* - 66 16 48 *
LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S	302 05 30 302 05 30 302 05 30 302 05 30 302 05 30		00 01 18.55 00 02 07.55 00 02 37.20 00 03 37.50 00 03 57.50	011 22 41 010 23 18 008 15 03	* = 72 02 06 # * = 73 51 48 # * = 73 41 18 *
LAPLAT C ARG LAPLAT C ARG SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 54 26 S 34 54 26 S 34 43 58 S 34 43 58 S 34 43 58 S	302 05 30 302 05 30 138 38 47 138 38 47 138 38 47	32 32	00 04 36.80 00 05 57.40 09 58 45.20 09 58 51.59 09 59 01.17	005 53 44 283 31 48 282 01 12	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47	32 32 32	09 59 09.26 09 59 19.62 09 59 29.34 09 59 35.86 09 59 47.34	274 15 36 271 07 12 268 57 36	50 16 48 51 34 48 52 37 12 53 22 48 54 27 00
SALSBURY AUS SALSBURY AUS ADLAID A AUS ADLAID A AUS	34 43 58 S 34 55 14 S	138 38 47 138 36 14	7 32 5 55	09 59 53.76 10 00 03.33 10 00 08.93 10 00 09.00	8 258 11 24 2 259 54 00	55 09 00 55 52 48 55 30 00 55 30 00

STATION	LATITUDE	LONG I TUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION*	SLAN RANG IN K
			7 SEP 1958	(CONT)			
SALSBURY AUS	34 43 58 S	138 38 47	32	10 90 12.28	254 25 48	56 28 48	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 90 18.57	251 37 12	56 49 12	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 90 24.86	248 36 00	57 07 12	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 90 31.64	245 30 00	57 21 36	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 90 39.44	241 40 12	57 33 00	
SALSBURY AUS	34 43 58 S	138 36 47	32	10 00 47.32	238 01 12	57 36 00	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 00 57.08	233 15 00	57 30 00	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 01 00.03	232 00 00	57 27 00	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 01 08.42	227 45 00	57 11 24	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 01 17.34	223 45 00	56 44 24	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 01 25.30	220 10 48	56 12 36	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 01 35.14	215 58 12	55 25 48	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 01 42.74	212 45 00	54 43 12	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 01 51.72	209 10 12	53 49 48	
ADLAID A AUS	34 55 14 S	138 36 14	55	10 02 00.00	015 58 00 #	62 00 00 *	
SALSBURY AUS	34 43 58 S	136 36 47	32	10 °2 °2 •17	205 06 00	52 38 24	
SALSBURY AUS	34 43 58 S	139 38 47	32	10 °2 11 •45	202 19 48	51 32 24	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 °2 18 •17	200 07 12	50 42 00	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 °2 21 •93	198 <b>52</b> 12	50 09 36	
ADLAID A AUS	34 55 14 S	138 36 14	55	10 °2 24 •00	016 00 00 *	69 00 00 **	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 02 25.00	197 18 00	49 21 36	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 02 34.31	195 23 24	48 27 00	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 02 41.72	193 27 36	47 30 00	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 02 51.20	191 10 48	46 27 36	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 03 00.13	188 57 00	44 50 24	
SALSBURY AUS ADLAID A AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 55 14 S 34 43 58 S 34 43 56 S 34 43 58 S	138 38 47 138 36 14 138 39 47 138 38 47 136 38 47	32 55 32 32 32	10 03 07.79 10 03 08.00 10 03 15.60 10 03 20.16 10 03 26.48	187 19 12 ' 016 40 00 * 185 45 36 184 55 12 ' 183 43 48	43 38 24 77 30 00 * 42 34 12 41 58 48 41 02 24	
SALSBURY AUS	34 43 58 3	139 38 47	32	10 03 33.16	182 25 12	40 02 24	
SALSBURY AUS	34 43 58 3	138 38 47	32	10 03 39.98	181 21 36	39 04 48	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 03 45.94	180 25 12	38 16 12	
SALSBURY AUS	34 43 58 5	139 38 47	3 <b>2</b>	10 03 52.66	179 23 24	37 19 48	
SALSBURY AUS	34 43 58 5	138 38 47	3 <b>2</b>	10 04 00.39	178 14 24	36 13 12	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 04 09.94	176 57 36	34 55 48	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 04 18.62	175 51 00	33 46 48	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 04 28.41	174 43 48	32 30 00	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 04 39.18	173 27 36	31 06 36	
SALSBURY AUS	34 43 58 S	138 38 47	32	10 04 47.08	172 37 12	30 09 00	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 136 38 47 138 38 47	32 32 32 32 32 32	10 04 58.74 10 05 71.03 10 05 27.11 10 05 30.13 10 05 48.07	171 33 00 169 35 74 167 53 24 168 06 36 167 23 24	28 41 24 26 04 48 25 08 24 24 03 36 23 08 24	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32 32	10 05 57.36 10 06 08.09 10 06 21.32 10 06 28.75 10 06 33.91	166 50 24 166 05 24 165 10 12 164 48 00 164 32 24	22 07 12 21 00 36 19 34 12 18 59 24 18 29 24	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 76 44.04	163 58 48	17 32 00	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 76 52.71	163 30 00	16 45 00	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 77 71.24	163 03 00	16 03 00	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 77 10.99	162 37 12	15 04 48	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 77 20.49	161 10 12	14 20 48	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 07 28.75	161 47 24	13 34 12	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 07 37.61	161 21 00	12 54 36	
SALSBURY AUS	34 63 58 5	138 38 47	32	10 07 44.32	161 04 48	12 12 12	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 07 50.38	160 48 36	11 51 36	
SALSBURY AUS	34 43 58 5	138 38 47	32	10 07 58.75	160 29 24	11 15 00	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 \$ 34 43 58 \$ 34 43 58 \$ 34 43 58 \$ 34 43 58 \$ 34 43 58 \$	139 38 47 139 38 47 138 38 47 138 38 47 138 38 47	3? 32 32 32 32	10 08 07.70 10 08 22.70 10 08 32.48 10 08 42.52 10 08 52.52	160 03 36 159 32 24 159 13 48 158 53 24 158 28 48	10 27 12 09 24 00 08 32 24 07 59 24 07 17 24	
SALSBURY AUS SALSBURY AUS SALSBURY AUS LAPLAT C ARG LAPLAT C ARG	34 43 58 S 34 43 58 S 34 43 58 S 34 54 26 S 34 54 26 S	138 38 47 138 38 47 138 38 47 302 05 30 302 05 30	32 32 32	10 99 03.90 10 99 20.71 10 09 28.50 23 23 17.00 23 25 30.60	158 09 36 157 36 00 157 20 24 014 38 19 014 24 54		

STATION	LATITUOE	LONGITUOE ÉAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION#	SLANT RANGE IN KM
			7 SEP 1958	(CONT)			
LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S	302 05 30 302 05 30 102 05 30 302 05 30		23 25 44.60 23 29 02.00 23 29 35.80 23 29 57.20	014 23 29 # 010 40 57 # 008 35 38 # 007 26 45 #	- 42 07 42 * - 79 29 00 * - 80 00 42 * - 78 57 00 *	
			8 SEP 1958				
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 36 47 138 38 47	32 32 32 32 32	09 23 12.62 09 23 20.75 09 23 29.43 09 23 38.67 09 23 46.74	317 27 03 316 59 09 316 24 03 315 46 51 315 12 46	36 16 19 37 20 20 38 36 46 39 56 16 41 12 07	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 36 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32 32	09 23 57.47 09 24 10.25 09 24 15.68 09 24 24.63 09 24 32.68	314 16 19 313 16 15 312 40 48 311 48 03 310 48 00	42 46 19 44 53 52 45 50 56 47 19 15 48 41 56	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 5 34 43 58 5 34 43 58 5 34 43 58 5 34 43 58 5	138 58 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32 32	09 24 41.60 09 25 00.23 09 25 09.97 09 25 17.94 09 25 28.12	309 43 40 307 55 26 305 14 02 303 37 33 301 22 48	50 23 02 53 45 21 55 43 19 57 10 40 59 12 07	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 5 34 43 58 5 34 43 58 5 34 43 58 5 34 43 58 5	138 36 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32	09 25 36.89 09 25 44.52 09 25 49.63 39 26 05.35 09 26 13.47	299 58 48 296 25 15 294 52 15 288 38 31 284 45 00	60 57 C7 62 31 51 63 29 24 66 34 C8 68 O2 24	•
SALSBURY AUS S/ SBURY AUS / 410 A AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 55 14 S 34 43 58 S 34 43 58 S	136 38 47 138 38 47 138 36 14 136 38 47 136 39 47	32 32 55 32 32	09 26 24.70 09 26 52.90 09 26 57.00 09 26 58.21 09 27 05.41	278 08 24 255 23 46 258 30 00 250 26 13 243 57 36	69 53 56 73 25 19 72 00 00 73 42 39 73 57 18	
SALSBURY AU SALSBURY AU SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 3° 47 138 3° 47	32 32 32 32 32 32	09 27 18.06 09 27 39.21 09 27 47.42 09 27 54.67 09 28 07.73	230 15 10 210 22 55 203 51 28 200 32 18 193 07 51	73 43 44 71 42 32 70 29 56 69 13 19 66 46 19	
AOLAID A AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS AOLAIO A AUS	34 55 14 S 34 43 58 S 34 43 58 S 34 43 58 S 34 55 14 S	138 36 14 138 38 47 138 38 47 136 38 47 138 36 14	. 55 32 32 32 32 55	09 28 10.00 09 28 14.42 09 28 28.43 09 28 34.98 09 26 41.00	017 15 00 * 189 55 55 184 22 12 192 20 24 017 50 00 *	- 56 30 00 * 65 29 52 62 37 31 61 07 26 - 64 00 00 *	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 36 47 138 38 47	32 32 32 32 32	07 28 47.21 07 28 54.46 09 29 04.25 09 29 12.17 09 29 31.25	178 54 21 177 15 36 175 07 19 173 40 22 173 44 45	58 34 30 56 59 42 54 54 36 53 20 42 49 28 12	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32 32	09 29 36.18 09 29 44.95 09 29 57.84 09 30 03.74 09 30 09.33	170 C4 30 168 21 36 167 33 O3 166 54 54 166 23 24	48 26 20 45 51 50 44 18 14 43 18 39 42 17 24	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32 32	C9 30 17.19 09 30 21.66 09 30 3C.18 09 30 36.48 09 30 44.20	165 42 00 165 16 40 164 38 20 164 12 36 163 35 06	40 56 24 40 09 43 38 43 48 37 41 27 36 28 48	,
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32 32	09 30 51.86 09 30 58.52 09 31 05.53 09 31 13.30 09 31 20.71	163 10 40 162 4C 51 162 16 55 161 55 08 161 28 12	35 19 22 34 17 06 33 14 42 32 13 12 31 03 07	
WOOMER AUS SALSBURY AUS SALSBURY AUS WOOMER AUS WOOMER AUS	31 06 06 S 34 +3 58 S 34 43 58 S 31 06 06 S 31 06 06 S	136 46 54 138 38 47 138 38 47 136 46 54 136 46 54	162 32 32 162 162	09 31 27.84 09 31 30.81 09 31 38.11 09 31 44.16 09 32 00.59	161 59 06 160 28 56 001 37 54 *	29 42 54 28 41 24 69 34 00	•
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47	32	09 32 05.42 09 32 27.79 09 32 33.87 09 32 43.33 09 32 51.49	158 39 32 158 25 26 158 09 00	25 07 40 22 39 39 22 02 52 20 59 06 20 12 25	

			1				
STATION	LATITUDE	LONGI TUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZĪMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			8 SEP 1958	(CONT)			
	20						
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32	09 32 59.44 09 33 11.57 09 33 20.76 09 33 28.77 09 33 45.17	157 33 39 157 16 55 157 01 51 156 50 16 156 24 18	19 21 03 18 08 09 17 14 24 16 28 19 14 58 55	•
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32	09 33 53.61 09 34 00.25 09 34 07.94 09 34 14.94 09 34 40.15	156 13 55 156 05 31 155 53 31 155 44 27 155 12 03	14 15 CO 13 41 27 12 58 04 12 26 42 10 27 03	
SALSBURY AUS SALSBÜRY AUS WOOMER AUS WOOMER AUS CPTWN A S AF	34 43 58 S 34 43 58 S 31 06 06 S 31 06 06 S 33 56 00 S	138 38 47 138 38 47 136 46 54 136 46 54 018 28 37	32 32 162 162 7	0° 34 48.87 0° 34 53.94 11 08 23.00 11 08 39.00 17 51 20.86	155 04 33 154 58 19 013 19 18 * 013 16 42 * 014 38 00 *	09 44 34 09 22 22 - 28 47 00 # - 31 00 00 # - 60 44 00 #	
LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S	302 05 30 302 05 30 302 05 30 302 05 30 302 05 30		22 46 57.10 22 47 34.00 22 47 41.60 22 50 42.90 22 50 51.20	014 46 54 * 014 43 47 * 014 43 45 * 014 53 51 * 014 53 55 *	06 06 18 * 02 03 42 * 00 57 24 * 32 26 30 * 34 27 42 *	
LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S	302 05 30 302 05 30 302 05 30 302 05 30 302 05 30		22 51 11.50 22 52 46.70 22 53 49.40 22 54 04.00 22 54 18.10	014 56 10 * 014 53 05 * 014 36 10 * 014 29 31 * 014 16 27 *	- 39 44 48 * - 62 37 48 * - 76 48 36 * - 79 46 54 * - 82 39 00 *	
LAPLAT C ARG	34 54 26 5	302 05 30		22 55 51.80	004 09 29 *	- 80 51 24 *	
LAPLAT C ARG	34 54 26 S	302 05 30		22 57 01.70	003 47 00 *	- 71 44 48 #	
			9 SEP 195	8			
MELBRNE AUS PT RICO B WI PT RICO B WI PT RICO B WI PT RICO B WI	37 49 54 S 18 18 00 N 18 18 00 N 18 18 00 N 18 18 00 N	144 58 24 292 51 00 292 51 00 292 51 00 292 51 00	29	08 56 35 09 09 35 00 00 09 35 30 00 09 36 00 00 09 36 30 00	180 00 00 147 32 24 128 42 36 105 20 24 088 29 24	65 00 00 13 40 48 15 51 00 17 00 00 16 07 48	
PT RICO B WI PT RICO 8 WI HUANCAYO PER UNION JOHSBG PRET B S AF	18 18 00 N 18 18 00 N 12 02 42 S 26 10 55 S 25 43 43 S	292 51 00 292 51 00 284 39 36 028 04 30 028 12 42	3350 1806 1311	09 37 26.00 09 37 40.00 10 11 30.00 17 13 26.00 17 16 30.60	059 43 12 052 59 24 033 00 00 013 22 30 * 012 27 00 *	08 59 24 06 58 48 30 00 00 - 29 54 00 * - 58 46 00 *	
PPET 8 S AF PRET 8 S AF PRET 8 S AF CPTWN A S AF	25 43 43 S 25 43 43 S 25 43 43 S 33 56 00 S	028 12 42 026 12 42 026 12 42 018 28 37	1311 1311 1311 7	17 16 59.00 17 18 35.60 17 19 21.30 17 21 00.00	012 10 00 * 012 30 30 4 009 16 00 * 002 20 00 *	- 62 36 00 * - 72 12 00 * - 74 06 00 * - 69 00 00 *	
			10 SEP 195	8 8			
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS MAUI HAWAII	31 06 06 S 31 06 06 S 31 06 06 S 31 06 06 S 20 42 36 N	136 46 54 136 46 54 136 46 54 136 46 54 203 44 23	162 162 162 162 3048	09 56 38.97 09 56 55.39 09 59 38.68 09 59 55.96 15 43 37.94	013 28 36 * 013 17 42 * 013 06 24 * 013 01 48 * 003 38 06 *		
MAUI HAWAII AREQUIPA PER AREQUIPA PER	20 42 36 N 16 23 C5 S 16 23 C5 S	203 44 23 288 27 55 288 27 55	3048 2377 2377	15 43 39.94 23 17 56.25 23 20 04.12	003 44 06 * 012 40 18 * 012 17 00 *	- 38 08 00 *	
			11 SEP 19	5 8			
ALBUO A NM	35 05 03 N	253 21 24	1520	11 50 26.30	099 00 00	06 24 00	
			12 580 19	53			
SACMTO E CAL SACMTO E CAL SACMTO E CAL SACMTO E CAL VAN NUYS CAL	38 32 55 N 38 32 55 N 38 32 55 N 38 32 55 N 38 32 55 N 34 14 22 N	233 14 51 238 14 51 238 14 51 238 14 51 241 24 45	15 15 15 15 276	03 45 30.70 05 43 26.10 12 53 42.10 12 53 59.30 12 54 30.00	180 00 00 000 00 00 007 13 35 * 007 37 06 *		
SACMTO E CAL MIL RAO MASS MIL RAO MASS	38 32 55 N 42 37 03 N 42 37 03 N	239 14 51 288 3C 28 288 3O 26	15 155 155	12 54 53.30 20 03 00.00 20 04 04.00	008 46 54 9 217 12 00 202 18 00	9 06 36 00 4 38 24 00 32 48 00	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			13 SEP 1958				
BRISTOL TENN OAYTON B O OAYTON B O CLEVELND A O	36 35 03 N 39 50 14 N 39 50 14 N 41 29 46 N	277 50 31 275 44 03 275 44 03 278 12 16	249 249 220	10 37 00.00 10 37 26.40 10 37 43.50 10 38 30.00	180 00 00 006 33 00 * 130 22 00 007 36 00 *	47 00 00 - 17 20 00 * 28 49 00 03 00 00 *	
	4		14 SEP 1958				
MIL RAO MASS ARLINGTON VA WASH WLSN DC BRISTOL TENN WASH WLSN OC	42 37 03 N . 38 50 48 N 38 50 00 N 36 35 03 N 38 50 00 N	268 30 28 282 53 35 282 59 24 277 50 31 282 59 24	155 59 527	09 57 46.00 09 58 34.00 09 58 44.00 09 59 16.00 09 59 16.00	208 24 00 180 00 00 005 10 00 * 090 00 00 005 48 00 *	02 30 00 19 30 00 - 26 00 00 * 21 30 00 - 11 48 00 *	1462
WASH WESN OC OAYTON B O WASH WESN OC BALTIMORE MO OAYTON B O	38 50 00 N 39 50 14 N 38 50 00 N 39 24 28 N 39 50 14 N	262 59 24 275 44 03 282 59 24 283 24 35 275 44 03	249 144 249	09 59 38.00 09 59 54.00 10 00 02.00 10 00 05.00 10 00 13.50	006 56 00 * 009 04 00 * 007 54 00 * 090 00 00	07 00 00 * 04 00 00 * 23 36 00 * 40 30 00 26 10 00 *	
MIL RAD MASS MIL RAD MASS ORGN PASS NM ORGN PASS NM ORGN PASS NM	42 37 03 N 42 37 03 N 32 25 24 N 32 25 24 N 32 25 24 N	288 30 28 288 30 28 253 26 51 253 26 51 253 26 51	155 155 1651 1651 16 <b>5</b> 1	10 00 15.00 10 03 14.00 11 37 50.30 11 37 50.95 11 37 51.95	199 00 00 036 12 00 006 49 10 * 006 51 54 * 006 54 42 *	38 54 00 13 54 00 - 01 59 00 * - 01 04 00 * - 00 10 00 *	429 1093
ALBUO-GS NM ALMGOO-GS.NM EL PASO TEX ALMGOO-GS.NM ALMGOO-GS.NM	35 06 22 N 32 52 22 N 31 49 41 N 32 52 22 N 32 52 22 N	253 23 14 254 03 05 253 36 36 254 03 05 254 03 05	1565 1339 1339 1339	11 38 04.00 11 38 09.00 11 38 11.50 11 38 27.00 11 39 03.00	008 53 00 * 007 16 06 * 080 00 00 008 13 18 * 009 48 54 *	17 18 00 * 09 36 00 * 35 30 00 24 48 00 * 40 12 00 *	· .
WICHITA KAN SACMTO E CAL SACMTO A CAL SACMTO E CAL KANYAMACHI J	37 41 44 N 38 32 55 N 38 38 25 N 38 32 55 N 34 03 46 N	262 45 19 236 14 51 238 43 24 238 14 51 135 15 10	413 15 160 15 40	11 40 43.10 13 19 50.60 13 20 12.00 13 20 55.70 19 59 04.00	014 38 00 * 001 31 44 * 001 35 15 * 022 31 00 * 000 30 00 *	85 30 00 * 15 35 00 * 40 52 00 * 89 15 00 * 15 00 00 *	
KONKO J L S URUZANAM L ARĐANIWAN L ARĐANIMAN L IHDAMAYNAN	34 32 31 N 35 20 04 N 34 30 24 N 34 30 24 N 34 03 46 N	133 37 40 139 07 48 135 48 15 135 48 15 135 15 10	50 66 66 40	19 59 14.50 20 00 05.00 20 00 07.00 20 00 38.00 20 00 57.00	270 00 00 308 54 00 00: 15 00 * 023 30 00 * 015 15 00 *	56 00 00 23 48 00 29 00 00 * 60 00 00 * 73 00 00 *	
			15 SEP 195	8			
MEUDON FR MEUDON FR SACMTO E CAL WASH WLSN DC WASH WLSN DC	48 48 16 N 48 46 18 N 38 32 55 N 38 50 00 N 38 50 00 N	0C2 13 52 0C2 13 52 238 14 51 282 59 24 282 59 24	162 162 15	04 22 37.00 04 23 04.90 05 17 50.70 09 19 41.00 09 20 30.00	108 34 00 097 25 00 000 00 00 007 02 00 *	13 20 00 12 55 00 37 00 00 - 21 08 00 + - 03 07 00 *	
BRYN ATHN PA OALLAS P TEX SACMTO E CAL SACMTO E CAL SACMTO E CAL	40 08 00 N 32 51 10 N 38 32 55 N 38 32 55 N 38 32 55 N	284 56 00 263 14 29 238 14 51 238 14 51 238 14 51	85 172 15 15	09 21 02.30 10 59 54.50 12 22 29.90 12 40 03.40 12 40 27.12	090 00 00 009 06 00 * 019 58 18 * 005 39 21 * 006 50 06 *		•
VAN NUYS CAL CHIN LAK CAL CHIN LAK CAL SACMTO E CAL CUL CY B CAL	34 14 22 N 35 39 25 N 35 39 25 N 38 32 55 N 33 57 11 N	241 24 45 242 20 13 242 20 13 238 14 51 241 37 26	276 701 701 15 30	12 40 34.00 12 40 55.40 12 41 08.45 12 41 13.00 12 45 45.00	018 20 00 * 357 30 00 003 00 00 00 00 00 00 00 00	84 00 00 *35 00 00 35 52 00 *22 00 00	
KONKO J	34 32 31 N	133 37 40	4	19 19 42.00	090 00 00	32 00 00	
			16 SEP 195				
MAORIO SP AMES A IOWA ST COLL PA ST COLL PA ST COLL PA	40 24 30 N 42 01 59 N 40 44 01 N 40 44 01 N 40 44 01 N	356 18 43 266 22 00 282 06 33 282 06 33 282 06 33	655 305 393 393 393	05 22 44.00 10 21 21.00 10 22 58.00 10 23 17.00 10 23 20.00	167 00 00 008 33 00 4 346 00 00 356 00 00 357 00 00	26 00 00 06 18 00 23 00 00 20 00 00 20 00 00	11
DENVR A COLO ASAHIKAWA J SAPPORO J	39 44 52 N 43 46 27 N 43 04 49 N	255 03 24 142 21 50 141 22 13	113	12 00 53.40 18 40 29.00 18 41 08.00	270 00 00 006 35 00 008 03 00		
			17 SEP 19	58			
MAORIO SP S FERNNOO SP MAORIO SP U.S.NAV B.OC	40 24 30 N 36 27 42 N 40 24 30 N 38 55 12 N	353 47 42 356 18 43	30 655	04 40 30.00 04 41 28.71 04 41 30.00 09 40 39.70	007 40 00 012 05 00 011 00 00 016 15 00	54 26 00 57 00 00	*

STATION	LATITUDE	LONG I TUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			17 SEP 1958	(CONT.)			
MANH P O KAN MANH P D KAN DENVR A COLO WICHITA KAN SACMTO E CAL	39 11 18 N 39 11 18 N 39 44 52 N 37 41 44 N 38 32 55 N	263 24 00 263 24 00 255 03 24 262 45 19 238 14 51	347 347 1625 413	11 19 49 20 11 20 40 00 11 20 40 20 11 20 47 50 13 00 06 00	023 02 00 # 317 04 30 037 15 00 330 12 00 022 35 12 #	28 00 00 # 23 31 51 32 30 00 20 03 00 35 20 00 #	
SACMTO E CAL SACMTO E CAL KURMEMACHI J	38 32 55 N 38 32 55 N 35 45 18 N	238 14 51 238 14 51 139 31 48	15 15 52	13 00 23 10 13 00 55 40 18 41 08 00	022 07 24 * 020 52 12 * 008 03 00 *	44 38 00 * 59 07 00 * 02 00 00 *	
			18 SEP 1958				
MEUDON FR MEUDON FR MEUDON FR HORSBRDG ENG MEUOON FR	48 48 18 N 48 46 18 N 48 48 18 N 50 53 00 N 48 48 18 N	002 13 52 002 13 52 002 13 52 000 15 00 002 13 52	162 162 162 162	03 59 50.90 04 00 18.00 04 00 44.90 04 00 47.00 04 01 39.60	133 01 00 113 39 00 095 47 00 117 00 00 071 38 00	24 52 00 26 03 00 24 22 00 23 00 00 17 45 00	
AMES A IOWA AMES A IOWA AMES IOWA BTLSVL-A OKL WICHITA KAN	42 01 59 N 42 01 59 N 42 01 49 N 36 42 18 N 37 41 44 N	266 22 00 266 22 00 266 20 59 264 03 36. 262 45 19	305 305 213 413	10 38 25.50 10 38 40.00 10 38 42.00 10 38 43.00 10 39 56.30	001 41 00 # 338 30 00 002 09 39 # 013 57 00 # 025 18 00	50 29 00 * 60 12 00 70 56 37 * 64 58 00 * 09 42 00	
AMES A IOWA PORTLANO ORE SACMTO A CAL SACMTO E CAL SACMTO E CAL	42 01 59 N 45 29 19 N 38 38 25 N 38 32 55 N 38 32 55 N	266 22 00 237 22 27 238 43 24 238 14 51 238 14 51	305 46 180 15 15	10 40 57.00 12 18 14.00 12 18 15.00 12 18 23.40 12 18 54.90	023 30 00 005 32 30 * 012 16 42 * 012 34 06 * 012 48 16 *	15 12 00 - 01 00 00 * 75 26 00 * 70 25 00 *	
MIL RAD MASS MIL RAD MASS MIL RAO MASS ASAHIKAWA J MIZUKAIDO J	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 43 46 27 N 36 00 56 N	288 30 28 288 30 28 288 30 28 142 21 50 139 59 18	155 155 155 113 12	17 34 58.00 17 40 03.00 17 44 03.00 18 57 33.00 18 57 45.00	326 00 00 284 06 00 150 24 00 001 05 00 *	63 15 00 *  13 48 00  86 54 00  30 00 00  21 00 00 *	2200 1002 1861
ASAHIKAWA J ASAHIKAWA J	43 46 27 N 43 46 27 N	142 21 50 142 21 50	113	18 58 03.00	001 10 00 #	17 00 00 60 00 00 #	
		147. 21 30	113 19 SEP 1958	19 90 00.00	013 02 00 #	56 00 00 *	
MEUDON FR	48 48 18 N	002 13 52	162	03 17 16.30			
MEUDON FR MEUDON FR MAORIO SP DENVR A COLO	48 48 18 N 48 48 18 N 40 24 30 N 39 44 52 N	002 13 52 002 13 52 356 18 43 255 03 24	162 162 655 1625	C3 17 52 1C C3 18 19 2C O4 58 45 00 11 35 51 00	100 21 00 087 44 00 079 46 00 016 10 00 * 329 00 00	11 48 00 10 39 00 09 32 00 60 05 00 #	
DENVR A COLO SENDAI J	39 44 52 N 38 15 22 N	255 03 24 140 51 56	1625 45	11 37 00 10 18 15 45 00	355 30 00 012 01 00 *	12 00 00	
			20 SEP 1958			45 00 00 #	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 46 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	02 34 36.30 02 34 44.70 02 34 53.90 02 35 02.40 02 35 11.70	165 12 00 162 54 00 160 18 00 157 42 00 154 24 00	11 00 00 11 42 00 12 36 00 13 24 00 14 18 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	02 35 19.90 02 35 29.20 02 35 38.00 02 35 43.30 02 35 56.60	151 36 00 148 06 00 144 18 00 140 30 00 136 54 00	15 06 00 15 54 00 16 42 00 17 24 00 17 54 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	02 36 06.00 02 36 14.80 02 36 32.30 02 36 42.30 02 36 52.10	132 54 00 129 06 00 121 18 00 117 00 00 112 48 00	18 30 00 18 42 00 19 12 00 19 06 00 19 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	02 37 01.00 02 37 11.70 02 37 20.40 02 37 29.50 02 37 47.50	109 18 00 104 54 00 101 42 00 098 24 00 092 36 00	18 54 00 18 24 00 18 06 00 17 30 00 16 30 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	02 38 04.50 02 38 13.70 02 38 23.10 02 38 32.20 02 38 41.60	087 48 00 085 18 00 083 06 00 081 00 00 079 00 00	15 24 00 14 48 00 14 00 00 13 30 00 12 42 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	02 38 50.60 02 38 59.30	077 18 00 075 36 00	12 06 00 11 30 00	

STATION LATITUDE	LONG I TUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
		20 SEP 1958	(CONT)			
JOKNN OB FIN 60 48 50 N JOKNN OB FIN 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	02 39 09.40 02 39 17.70 02 40 02.90 02 40 11.80 02 40 30.10	073 54 00 072 42 00 066 42 00 065 42 00 063 54 00	10 48 00 10 18 00 07 18 00 06 48 00 05 48 00	×-
		21 SER 1958				
BLFST-B•N•IR 54 33 00 N BLFST-B•N•IR 54 33 00 N COPNGN B DEN 55 42 13 N COPNGN B DEN 55 42 13 N	354 06 00 354 06 00 012 27 09 012 27 09	10 10	03 29 21.00 03 31 51.00 03 32 11.00 03 32 12.04	007 36 00 * 010 08 00 * 010 40 00 * 010 54 00 *	01 00 00 # 12 00 00 # 37 00 00 # 22 30 00 #	
FARNHAM ENG 51 12 00 N		22 SEP 1958				
MEUDON FR 48 48 18 N CHELMSFD ENG 51 43 00 N MEUDON FR 48 48 18 N MEUOON FR 48 48 18 N	359 12 00 002 13 52 000 30 00 002 13 52 002 13 52	162 162 162	04 22 52.5D 04 23 27.60 04 23 44.00 04 23 46.40 04 24 04.90	000 24 00 <b>*</b> 316 57 00 023 42 00 <b>*</b> 329 22 00 340 42 00	30 00 00 <b>*</b> 29 02 00 60 30 00 <b>*</b> 28 48 00 27 32 00	
MEUDON FR 48 48 18 N BUSSUM NETH 52 16 52 N	002 13 52 005 09 18	162	04 24 20.10	348 46 00	25 56 00	
CHELMSFO ENG 51 43 00 N	000 30 00		04 25 04.50 04 25 44.00	018 22 00 * 013 28 00 *	72 36 00 # 54 00 00 #	
		23 SEP 1958			J	
BUSSUM NETH 52 16 52 N BUSSUM NETH 52 16 52 N MEUOON FR 48 48 18 N MEUOON FR 48 48 18 N MEUOON FR 48 48 18 N	005 09 18 005 09 18 002 13 52 002 13 52 002 13 52	162 162 162	03 35 51.70 03 35 59.70 03 36 09.90 03 36 29.70 03 36 48.50	001 55 42 * 002 05 00 *. 014 49 00 021 20 00 025 00 00	35 00 00 <b>*</b> 4.7 30 00 <b>*</b> 39 59 00 32 24 00 26 54 00	
STEENWK NETH   52 47 29 N	006 06 38 005 09 18 001 36 00 001 36 00 001 36 00		03 37 18.70 03 37 44.70 03 38 59.00 03 39 39.00 03 40 27.00	010 40 00 # 011 44 18 # 042 37 00 042 03 00 041 47 00	69 30 00 * 56 00 00 * 15 00 00 10 00 00 06 00 00	
ORFONESS ENG 52 06 00 N MIL RAD MASS 42 37 03 N	001 36 00 285 30 28	15.5	03 41 20.00	041 37 00	03 00 00	
	200 30 20	155 24 SER 1958	12 00 56.0C	001 42 00	01 24 00	2698
MIL RAD MASS 42 37 03 N	268 30 28	155	03 45			
MIL RAD MASS 42 37 03 N MIL RAO MASS 42 37 03 N MIL RAD MASS 42 37 03 N MIL RAO MASS 42 37 03 N	288 30 28 286 30 28 288 30 28 288 30 28	155 155 155 155	07 45 35.00 07 48 12.00 09 27 03.00 09 30 29.00 11 10 23.00	025 00 00 030 48 00 341 36 00 016 06 00 352 12 00	13 42 00 00 54 00 06 36 00 00 18 00 00 18 00	1184 2317 1833 2668 2608
MIL RAD MASS 42 37 03 N MIL RAD MASS 42 37 03 N	288 30 28 288 30 28	15 <b>5</b> 155	11 14 19:00 14 36 11:00	023 54 00	00 18 00	3080
MIL RAD MASS 42 37 03 N MIL RAD MASS 42 37 03 N MIL RAD MASS 42 37 03 N MIL RAD MASS 42 37 03 N	288 30 28 288 30 28 288 30 28	155 155 155	14 39 45.00 14 41 34.00 16 18 37.00	354 42 00 042 12 00 069 36 00 319 00 00	13 48 00 27 00 00 24 18 00 22 24 00	2109 1672 1859 1824
MIL RAD MASS 42 37 03 N MIL RAD MASS 42 37 03 N MIL RAO MASS 42 37 03 N	288 30 28 288 30 28 288 30 28 286 30 28	155 155 155 155	16 22 22.00 16 26 31.00 18 02 01.00 18 08 17.00	254 36 00 162 42 00 274 18 00 221 24 00	31 24 00 28 42 00 11 24 00 09 06 00	1061 1908 2682 3118
		25 SEP 1958				3110
STERWK NETH 52 47 29 N CHELMSFD ENG 51 43 CC N HORSBRDG ENG 50 53 CO N HORSBRDG ENG 50 53 CO N HANOVR F GER 52 22 18 N	000 06 38 000 30 00 000 15 00 000 15 00 009 47 22		03 39 23.490 03 40 03.600 03 41 48.600 03 42 05.600 03 49 50.600	018 20 00 * 012 57 00 * 035 00 00 036 00 00 012 59 50 *	72 06 00 * 56 00 00 * 11 00 00 09 00 00 71 43 45 *	
		26 SEP 1958				
ORFONESS ENG 52 06 00 N CHELMSFD ENG 51 43 00 N ORFONESS ENG 52 06 00 N ORFONESS ENG 52 06 00 N ORFONESS ENG 52 06 00 N	001 36 00 003 30 00 001 36 00 001 36 00 001 36 00		04 28 21.90 04 28 39.00 04 29 15.30 04 30 39.00 04 32 04.80	311 30 00 022 46 00 • 333 24 00 003 12 00 023 30 00	18 00 00 46 00 00 <b>4</b> 21 00 00 18 00 00	
ORFDNESS ENG 52 06 00 N ORFDNESS ENG 52 06 00 N	001 36 00 001 36 00		04 33 26 • 00	031 18 00	07 00 00	
00 00 N	001 36 00		04 34 43.40	037 00 00	04 00 00	

STATION	LATITUDE	LONGITUDE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION#	SLANT RANGE IN KM
			27 SEP 1958				
CHELMSFD ENG MEUDON FR MEUDON FR MEUDON FR MEUDON FR	51 43 00 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	000 30 00 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162	03 36 22.00 03 36 47.90 03 37 04.20 03 37 19.60 03 37 39.60	017 10 00 357 21 00 001 52 00 005 48 00 010 09 00	66 00 00 16 31 00 15 22 00 14 15 00 12 52 00	
MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52	162	03 37 57.90 03 38 18.70 03 38 36.10	013 42 00 017 14 00 019 46 00	11 36 00 10 08 00 09 01 00	
•			28 SEP 1958				
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	02 43 36.60 02 43 42.60 02 43 47.70 02 43 55.70 02 44 03.50	259 36 00 260 30 00 261 36 00 263 06 00 264 54 00	28 24 00 30 12 00 32 06 00 34 54 00 37 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	02 44 12.90 02 44 21.10 02 44 28.60 02 44 39.10 02 44 47.00	267 42 00 270 42 00 274 12 00 280 36 00 287 18 00	41 48 00 45 36 00 49 12 00 54 36 00 58 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 46 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	02 44 55.00 02 45 05.60 02 43 19.30 02 45 31.30 02 45 46.30	296 00 00 312 24 00 339 54 00 002 36 00 022 30 00	62 36 00 66 36 00 68 24 00 66 18 00 60 24 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 05	103 103 103 103 103	02 45 56.10 02 46 05.70 02 46 17.30 02 46 24.70 02 46 33.10	030 24 00 036 00 00 040 54 00 043 12 00 045 30 00	56 06 00 51 48 00 47 12 00 44 18 00 41 24 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	02 46 41.70 02 46 52.10 02 47 00.20 02 47 12.40 02 47 20.70	047 30 00 049 24 00 050 36 00 052 06 00 053 00 00	38 36 00 35 36 00 33 24 00 30 36 00 28 54 00	
JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	02 47 29.90 02 47 38.90	053 48 00 054 42 00	27 00 00 25 24 00	
COPNGN B OEN	55 42 13 N	012 27 09	29 SEP 1958	0 <b>3</b> 28 54•03	020 47 30 *	47 20 00 *	
COPNGN B DEN COPNGN B DEN COPNGN B DEN MIL RAO MASS	55 42 13 N 55 42 13 N 55 42 13 N 55 42 13 N	012 27 09 012 27 09 012 27 09 012 27 09 288 30 28	10 10 10 155	03 29 50 03 03 30 26 06 03 30 47 50 13 34 53 00	018 09 54 # 017 40 00 # 016 27 00 # 021 56 12	60 30 00 * 62 00 00 * 58 00 00 * 28 43 12	
MIL RAD MASS MIL RAD MASS MIL RAD MASS MIL RAD MASS MIL RAD MASS	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N	288 30 28 288 30 28 288 30 28 288 30 28 288 30 28	155 155 155 155 155	13 35 56 00 13 36 29 80 13 37 02 30 13 38 35 20 13 40 46 00	041 05 24 051 37 48 061 22 12 083 37 48 102 00 24	31 47 24 32 00 06 31 10 48 25 38 24 15 48 00	1515 1528 1576 1839 2405
			30 SEP 195	8			
MIL RAD MASS	42 37 03 N	288 30 28	155	16 25 38 • 70	250 08 24	24 30 00	2405
			1 OCT 195	8			
FARNHAM ENG	51 12 00 N	359 12 00	2 OCT 195		005 42 00	14 00 00	
NOME ALASKA NOME ALASKA	64 31 00 N 64 31 00 N	194 34 09 194 34 00			000 00 00	88 00 00 87 00 00	
ORFDNESS ENG ORFDNESS ENG ORFDNESS ENG ORFDNESS ENG ORFDNESS ENG	52 06 00 N 52 06 00 N 52 06 00 N	001 36 00 001 36 00 001 36 00		02 59 45 00 03 00 44 02 03 01 39 60	003 12 00 019 00 00 025 42 00 031 21 00 040 21 00	13 00 00 10 00 00 07 00 00	
ORFDMESS ENG ORFDMESS ENG ORFDMESS ENG	52 06 00 N	001 36 00	)	04 42 36 80 04 43 54 80 04 44 08 00	023 30 00 036 24 00 042 36 00	04 00 00 15 00 00 12 00 00 10 00 <b>0</b> 0	

STATION	LATITUOE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			3 OCT 195	8 (CONT)			
ORFONESS ENG	52 06 00 N	001 36 00		04 45 43.20	052 09 00	07 00 00	
			6 OCT 195	8		•	
COPNGN B OEN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	55 42 13 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	012 27 09 023 30 09 023 30 09 023 30 09 023 30 09	10 103 103 103	03 18 17.00 03 18 55.20 03 19 04.70 03 19 13.60 03 19 22.90	015 32 00 * 030 42 00 037 48 00 043 42 00 049 24 00	46 00 00 * 54 18 00 53 00 00 51 30 00 49 42 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	03 19 31.70 03 19 40.20 03 20 09.45 03 20 17.00 03 20 26.80	054 06 00 058 18 00 068 36 00 070 36 00 072 54 00	47 48 00 45 54 00 39 30 00 37 54 00 36 06 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	03 20 44.70 03 20 54.70 03 21 03.20 03 21 12.60 03 21 22.00	076 36 00 078 12 00 079 30 00 080 48 00 081 54 00	32 36 00 31 00 00 29 36 00 28 06 00 26 42 00	
JOKNN 09 FIN JOKNN 08 FIN JOKNN 08 FIN JOKNN 08 FIN JOKNN 09 FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	03 21 39.00 03 21 50.10 03 21 58.90 03 22 08.30 03 22 17.40	083 48 00 084 54 00 085 30 00 086 24 00 087 06 00	24 24 00 23 06 00 22 00 00 20 54 00 19 48 00	
JOKAN OB FIN JOKAN OB FIN COPAGA B OEN COPAGA B OEN COPAGA B OEN	60 48 50 N 60 48 50 N 55 42 13 N 55 42 13 N 55 42 13 N	023 30 09 023 30 09 012 27 09 012 27 09 012 27 09	103 103 10 10	03 22 26.40 03 22 35.80 03 29 52.00 03 30 28.00 03 31 06.00	087 42'00 088 18 00 008 17 00 * 008 36 00 * 008 45 00 *	18 54 00 18 00 00 36 55 00 # 25 40 00 # 16 18 00 #	,
TATSFLD ENG CHELMSFD ENG COLL C ALAS	51 18 00 N 51 43 00 N 64 51 36 N	000 00 00 000 30 00 212 12 12	137	04 56 57.00 04 59 32.00 14 47 55.00	356 00 00 014 09 00 # 000 00 00	16 00 00 44 00 00 * 90 00 00	*
			7 OCT 19	958			
COLL C ALAS	64 51 36 N	212 12 12		11 44 36.00	156 00 00	43 00 00	
840 8466		200 00 00	8 OCT 1				
MIL RAO MASS MIL RAO MASS MIL RAO MASS MIL RAO MASS MEUOON FR	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 48 48 18 N	288 30 28 288 30 28 288 30 28 288 30 28 002 13 52	155 155 155 155 162	02 35 30.00 04 12 53.00 04 16 08.00 04 18 23.00 04 28 46.00	114 48 00 228 30 00 303 12 00 016 24 00 004 31 00	04 30 00 03 06 00 41 30 00 16 06 00 13 57 00	1510 1545 507 1122
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 46 18 N 48 48 18 N 48 48 13 N 48 48 18 N 48 48 19 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	04 29 03.70 04 29 23.00 04 29 42.10 04 29 57.90 04 30 28.60	008 27 00 012 48 00 017 07 00 020 48 00 027 37 00	14 35 00 15 02 00 15 20 00 15 31 00 15 30 00	
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	04 30 47.00 04 31 05.60 04 31 23.00 04 31 42.70 04 32 00.30	031 41 00 035 36 00 039 05 00 042 57 00 046 07 00	15 21 00 15 04 00 14 42 00 14 11 00 13 37 00	
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 152 162 162 162	04 32 38.00 04 33 06.40 04 33 22.40 04 33 41.80 04 34 00.86	056 37 00 058 55 00 061 27 00	12 17 00 11 06 00 10 25 00 09 34 00 08 48 00	
MEUDON FR ADLAIO C AUS	48 48 18 N 34 44 00 5	002 13 52 138 40 00	162	04 34 18.50 10 23 45.00		07 58 00	•
			9 OCT :			22 22 30	
HARROGTE ENG HARROGTE ENG HARROGTE ENG CLEVELNO A O CLEVELND A O	53 59 00 N 53 59 00 N 53 59 00 N 41 29 46 N 41 29 46 N	358 26 00 358 26 00 278 12 16	220	03 20 36.50 03 21 32.50 03 22 46.50 09 27 06.00 09 30 13.00	015 45 00 6 013 45 00 6 011 10 00 6	56 00 00 49 30 00 61 00 00	* *
COLL C ALAS	64 51 36 N 64 51 36 N			13 09 12.00 14 52 02.00		87 00 00 61 00 00	

STATION	LATITUOE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			10 OCT 195	8			
JOKNN OB EIN JOKNN OB EIN JOKNN OB EIN JOKNN OB EIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	00 36 53.70 00 36 59.90 00 37 09.40 00 37 19.80 00 37 30.80	047 36 00 049 06 00 051 06 00 053 00 00 054 54 00	32 36 00 31 36 00 29 48 00 28 06 00 26 18 00	
OKNM OB EIN OKNM OB EIN OKNM OB EIN OKNM OB EIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	00 37 45.60 00 37 55.10 00 38 07.00 00 38 18.50 00 38 29.90	056 54 00 058 12 00 059 30 00 060 36 00 061 36 00	24 06 00 22 48 00 21 12 00 19 54 00 18 36 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	00 38 42.30 00 38 55.10 00 39 09.90 00 39 21.40 00 39 32.60	062 42 00 063 42 00 064 36 00 065 18 00 065 54 00	17 12 00 16 00 00 14 30 00 13 30 00 12 36 00	
JOKNN OB EIN JOKNN OB EIN JOKNN OB EIN JOKNN OB EIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	00 39 46.70 00 40 05.40 00 40 26.70 00 40 35.90 00 40 45.60	066 42 00 067 30 00 068 30 00 068 48 00 069 06 00	11 30 00 10 00 00 08 36 00 07 54 00 07 18 00	
JOKNY OB EIN JOKNY OB EIN JOKNY OB EIN JOKNY CB EIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	00 41 02.10 00 41 13.30 00 41 29.70 00 41 41.80 02 15 00.00	069 42 00 070 06 00 070 36 00 070 54 00 315 00 00	06 18 00 05 36 00 04 42 00 04 00 00 34 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	02 15 09.80 02 15 20.10 02 15 30.40 02 15 43.30 02 15 58.10	317 42 00 321 24 00 325 30 00 331 48 00 340 36 00	37 24 00 40 06 00 42 54 00 46 30 00 50 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	02 16 09.00 02 16 19.00 02 16 41.00 02 16 51.70 02 17 03.40	348 18 00 356 06 00 015 46 00 025 12 00 034 42 00	52 24 00 54 00 00 55 30 00 55 00 00 53 48 00	
JOKANA OB FIN MIL RAD MASS JOKANA OB FIN JOKANA OB FIN JOKANA OB FIN	60 48 50 N 42 37 03 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 288 30 28 023 30 09 023 30 09 023 30 09	103 155 103 103 103	02 17 21 10 03 40 35 00 00 03 54 58 90 03 55 07 60 03 55 17 80	047 06 00 234 00 00 298 30 00 298 12 00 297 42 00	50 42 00 11 54 00 25 12 00 26 48 00 28 54 00	1052
JOKNY OB EIN JOKNY OB EIN JOKNY OB EIN JOKNY OB EIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	03 55 25.40 03 55 33.70 03 55 44.10 03 55 52.80 03 56 00.80	297 18 00 296 54 00 296 12 00 295 36 00 294 54 00	30 42 00 32 36 00 35 18 00 37 42 00 40 00 00	
JOKNN OB EIN JOKNN OB EIN JOKNN OB EIN JOKNN OB EIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	03 56 10.40 03 56 19.60 03 56 28.70 03 56 37.20 03 56 44.50	294 00 00 292 54 00 291 36 00 290 06 00 288 30 00	42 54 00 46 00 00 49 18 00 52 24 00 55 18 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	03 56 54.00 03 57 04.00 03 57 11.90 03 57 23.60 03 57 34.60	286 00 00 282 18 00 278 18 00 269 30 00 255 30 00	59 12 00 63 24 00 63 54 00 71 42 00 76 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	03 57 50.50 03 58 19.60 03 58 54.40 03 59 02.80 03 59 21.70	219 00 00 162 42 00 144 24 00 142 18 00 139 06 00	79 00 00 72 24 00 59 06 00 56 06 00 49 <b>54 00</b>	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	03 59 30.30 03 59 39.70 03 59 53.90 04 00 09.40 04 00 19.40	138 06 00 137 00 00 135 48 00 134 48 00 134 18 00	47 24 00 44 48 00 41 12 00 37 42 00 35 42 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	04 00 29.10 04 00 42.70 04 00 58.30 04 01 11.10 04 01 20.90	133 48 00 133 18 00 132 48 00 132 30 00 132 12 00	33 48 00 31 18 00 28 48 00 26 54 00 25 30 00	

CTATION.	. 47.17.105	LONGITUOE	HEIGHT .	TIME GMT	AZIMUTH OR	ELEVATION OR	SLAN'
STATION	LATITUOE	EAST	METERS	HR MIN SEC	RGT ASCEN *	DECLINATION*	TN K
			10 OCT 1958	(CONT)			
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	04 01 34.70 04 01 46.30 04 01 56.60 04 02 09.70 04 02 19.20	131 54 00 131 36 00 131 24 00 131 12 00 131 06 00	23 48 00 22 18 00 21 06 00 19 42 00 18 42 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	04 02 38.20 04 02 49.90 04 03 01.10 04 03 12.70 04 03 24.40	130 48 00 130 48 00 130 42 00 130 36 00 130 24 00	16 54 00 15 48 00 14 48 00 13 48 00 12 54 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103.	04 03 37.30 04 03 49.70 04 04 02.80 04 04 16.90 04 04 30.80	130 18 00 130 18 00 130 12 00 130 06 00 130 00 00	1? 00 00 11 00 00 10 06 00 09 06 00 08 06 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	04 04 43.20 04 04 53.56 04 05 07.70 04 05 17.70 04 05 27.30	130 00 00 129 54 00 129 54 00 129 48 00 129 48 00	07 24 00 06 42 00 05 54 00 05 18 00 04 48 00	
JOKNN OR FIN COLL C ALAS COLL C ALAS	60 48 50 N 64 51 36 N 64 51 36 N	023 30 09 212 12 12 212 12 12	103 137 137	04 05 57.60 13 42 42.00 13 45 19.00	129 48 00 180 00 00 106 00 00	03 12 00 90 00 00 36 00 00	
		•	11 OCT 195	В			
HARROGTE ENG CHELMSFO ENG WOOMER AUS WOOMER AUS WOOMER AUS	53 59 00 N 51 43 00 N 31 06 06 S 31 06 06 S 31 06 06 S	358 26 00 000 30 00 136 46 54 136 46 54 136 46 54	162 162 162	03 30 55.00 04 28 52.00 10 22 18.39 10 22 26.16 10 22 33.92	135 00 00 013 23 00 * 012 31 48 * 012 37 00 * 012 42 48 *	45 00 00 53 30 00 * 57 25 00 * 58 03 00 * 58 45 00 *	
WOOMER AUS	31 06 95 5	136 46 54	162	10 22 41.69	012 49 12 *	<b>-</b> 59 30 00 <b>*</b>	
			12 OCT 195	58			•
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	00 01 42.60 00 02 00.00 00 02 09.80 00 02 19.60 00 02 29.00	065 00 00 066 00 00 066 24 00 056 48 00 067 12 00	12 18 00 11 00 00 10 12 00 09 30 00 08 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	00 02 38.00 00 02 55.60 00 03 24.20 00 03 41.80 01 38 41.80	067 36 00 068 12 00 069 06 00 069 42 00 016 48 00	03 12 00 07 00 00 05 18 00 04 18 00 54 06 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 50 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	01 38 53.80 01 39 06.40 01 39 16.00 01 39 25.20 01 39 35.70	025 48 00 035 30 00 042 06 00 047 30 00 053 18 00	53 24 00 51 54 00 50 18 00 48 36 00 46 18 00	
JOKNN OR FIN JOKNN OR FIN JOKNN OR FIN JOKNN OR FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	01 39 46.20 01 40 01.30 01 40 10.80 01 40 23.80 01 40 37.00	057 48 00 063 18 00 066 24 00 069 36 00 072 42 00	44 06 00 40 54 00 38 48 00 36 12 00 33 42 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 022 30 09 023 30 09	103 103 103 103 103	01 40 50.20 01 41 05.40 01 41 19.20 01 41 29.00 01 41 46.70	075 06 00 077 30 00 079 24 00 080 36 00 082 24 00	31 24 00 28 54 00 26 48 00 25 24 00 23 06 <b>0</b> 0	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	01 42 06.00 01 42 40.40 01 43 01.00 - 01 43 20.00 01 43 46.80	084 12 00 086 42 00 087 54 00 088 54 00 090 06 00	20 48 00 17 18 00 15 18 00 13 42 00 11 30 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN - JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09	103 103 103	01 44 15.30 01 44 34.60 01 45 01.40 01 45 28.00 01 46 07.00	091 18 00 091 54 00 092 48 00 093 30 00 094 18 00	09 36 00 08 12 00 06 36 00 05 00 00 02 54 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N	023 30 09	103	03 16 09•30 03 16 20•80	300 18 00	18 12 00 19 54 00	

STATION	LATITUOE	LONGITUDE EAST	IN	1E GMT IN 1IN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			12 OCT 1958 (CON	(T)			
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 03 1 103 03 1 103 03 1	16 35.60 16 47.70 17 02.30 17 16.00	299 54 00 299 36 00 299 18 00 298 54 00 298 24 00	22 24 00 24 36 00 27 24 00 30 30 00 33 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 03 1 103 03 1 103 03 1	17 50.00 17 59.90 18 17.00 18 36.10 18 46.40	297 30 00 297 00 00 295 36 00 293 18 00 291 24 00	39 36 00 42 30 00 48 30 00 56 06 00 60 36 00	
JOKNN OB EIN JOKNN OB EIN JOKNN OB EIN JOKNN OB EIN	60 48 50 N 50 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 3C 09 023 30 09 023 30 09 023 30 09 023 30 09	103 03 1 103 03 2	18 58.30 19 09.00 19 19.30 20 13.80 20 26.20	288 18 00 283 30 00 275 48 00 146 30 00 140 42 00	65 54 00 71 00 00 75 48 00 72 48 00 67 24 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 6C 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 03 2 103 03 2 103 03 2	20 31.90 20 33.70 20 47.20 21 03.80 21 15.60	139 00 00 137 12 00 135 36 CC 133 24 00 132 30 0C	65 06 00 62 12 00 58 48 00 53 00 00 49 12 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 50 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 03 2 103 03 2 103 03 2	20.30 21 38.70 21 55.20 22 06.70	131 30 00 131 00 00 130 12 00 129 54 00 129 18 00	45 30 00 42 48 00 38 42 00 36 18 00	
JOKNN OB EIN JOKNN OB EIN JOKNN OB EIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 03 2 103 03 2 103 03 2 103 03 2	22 36.30 22 53.40 23 12.40 23 25.50 23 44.90	129 06 00 128 42 00 128 30 00 128 18 00 128 06 00	32 54 00 30 42 00 28 00 00 25 18 00 23 30 00 21 12 00	
OCKNA OB EIN OCKNA OB EIN OCKNA OB EIN OCKNA OB EIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 03 2 103 03 2 103 03 2	3 56.00 4 24.30 4 49.00 5 10.30 5 35.60	128 00 00 127 48 00 127 42 00 127 36 00 127 30 00	19 48 00 17 36 00 14 54 00 13 06 00 11 12 00	
JOKNN CR FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN HARROGTE ENS	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 53 59 00 N	023 30 09 023 30 09 023 30 09 023 30 09 358 26 00	103 03 2 103 03 2 103 03 2	6 07.90 6 40.40 7 11.00 7 34.00 6 58.50	127 30 00 127 24 00 127 24 00 127 24 00 340 00 00	08 54 90 06 48 00 05 00 00 03 42 00 00 00	
HARROGTE ENG ARBEVILLE FR VAN NUYS CAL VAN NUYS CAL TOKYO JAPAN	53 59 00 N 50 07 30 N 34 14 22 N 34 14 22 N 35 40 11 N	358 26 00 901 49 42 241 24 45 241 24 45 139 32 28	276 12 2 276 12 2	7 43.50 0 45.00 5 03.00 7 40.00 4 39.26	200 00 00 109 48 00 045 20 00 09 00 00 213 11 30 *	00 00 00 30 00 00 31 00 00 20 00 00 41 09 00 *	
TOKYO JAPAN SJUAN-GS ARG SJUAN-GS ARG	35 40 11 N 31 30 37 S 31 30 37 S	139 32 28 291 22 46 291 22 46	65C 23 5	5 10.35 7 04.00 7 22.00	012 37 30 * 017 37 00 * 018 20 00 *	28 16 00 * - 04 18 00 * 09 00 00 *	
BUSSUM NETH BUSSUM NETH BUSSUM NETH BUSSUM NETH HILVRSM NETH	52 16 52 N 52 12 23 N	005 09 18 005 09 18 005 09 18 005 09 18 005 10 05	C3 4 O3 4 C3 4	5 33.50 7 04.80 8 00.60 8 06.70 8 14.70	019 37 90 * 017 06 70 * C12 47 4C * C14 13 90 * 013 34 30 *	53 12 00 * 66 42 00 * 55 06 00 * 64 24 00 * 11 18 00 *	
HILVRSM NETH HILVRSM NETH HILVRSM NETH LNDSTRT NETH HILVRSM NETH	52 12 23 N 52 12 23 N 52 12 23 N 52 12 23 N 52 37 39 N 52 12 23 N	005 10 05 005 10 05 005 10 05 004 44 58 005 10 05	03 4 03 4 03 4	6 25.3C 8 35.90 8 46.50 9 51.1C 8 57.0C	013 16 10 * 011 09 73 * 011 55 00 * 012 20 24 * 012 34 30 *	59 18 00 * 57 12 00 * 55 00 00 * 51 54 00 * 52 42 00 *	
HILVRSM NETH ATHENS GR ADLAIO A AUS LITHGOW AUS LITHGOW AUS	52 12 23 N 37 58 19 N 34 55 14 5 33 30 00 5 33 30 00 5	005 1C 05 023 43 01 138 36 14 150 07 00 150 07 00	110 03 5 55 09 4 09 4	9 07.70 2 39.90 2 42.00 4 48.00 5 50.00	012 22 80 * 026 18 00 017 25 00 * 276 00 00 282 00 00	50 18 00 * 23 30 00 * 23 30 00 * 14 00 00 12 00 00	
OAYTON B O OAYTON B O DAYTON B O CPTWN A S AF PRET B S AF	39 50 14 N 39 50 14 N 39 50 14 N 39 50 14 N 33 56 00 S 25 43 43 S	275 44 03 275 44 03 275 44 03 018 28 37 028 12 42	249 10 2 249 10 2 7 17 5	2 50.00 4 05.00 4 31.00 1 59.00 3 45.00	033 18 0C 012 51 00 # 012 09 30 # 016 05 00 # 015 16 00 #	17 30 00 39 54 00 * 20 54 00 * - 21 30 00 * - 18 00 00 *	

STATION	LATITUOE	LONGITUDE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR	ELEVATION OR	SLANT RANGE
					RGT ASCEN #	DECLINATION*	IN KM
CPTWN A S AF LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	33 56 00 S 34 54 26 S 34 54 26 S 34 54 26 S 34 54 26 S	018 28 37 302 05 30 302 05 30 302 05 30 302 05 30	13 OCT 1958 7	17 53 54 80 22 44 26 30 22 45 02 00 22 45 44 10 22 46 04 40	019 40 00 * 014 55 49 * 016 35 54 * 018 43 38 * 019 32 50 *	45 16 00 # 42 54 00 # 28 50 00 # 25 21 06 # 19 35 00 #	
LAPLAT C ARG LAPLAT C ARG	34 54 26 S 34 54 26 S	302 05 30 302 05 30		22 46 13 • 50 22 46 32 • 00	019 51 30 * 020 22 29 *	24 32 42 * 31 57 18 *	
JOKNN OB FIN	60 48 50 N	023 30 09	14 OCT 1958				
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	0?3 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	00 57 48.40 00 57 57.60 00 58 24.70 00 58 33.40 00 58 42.50	068 30 00 070 30 00 074 36 00 075 54 00 077 06 00	32 54 00 31 12 00 27 12 00 25 49 00 24 36 00	
JOKNN OB FIN JOKNN OB FIN STEENWK NETH ADLAID A AUS AMES A IOWA	60 48 50 N 60 48 50 N 52 47 29 N 34 55 14 S 42 01 59 N	023 30 09 023 30 09 006 06 38 138 36 14 266 22 00	103 103 55 305	02 35 54.80 02 38 18.70 04 28 25.00 10 09 13.00 10 48 55.00	301 42 00 121 54 00 004 28 25 # 615 00 00 #	62 13 00 49 42 00 71 12 00 # - 13 00 00 # 21 30 00	
MLWKEE B WIS DAYTON B O MIL RAD MASS DAYTON B O AMES A IOWA	42 59 25 N 39 50 14 N 42 37 03 N 39 50 14 N 42 01 59 N	272 01 15 275 44 03 288 30 25 275 44 03 266 22 00	249 155 249 305	10 49 02.30 10 49 05.00 10 49 41.00 10 50 01.00 10 50 15.50	015 12 00 * 017 55 00 * 327 30 00 015 18 00 * 012 47 11 *	71 00 00 * 71 46 00 * 28 30 00 72 36 00 * 46 24 15 *	835
AMES A IOWA MLWKEE B WIS AMES A IOWA MIL RAD MASS CLEVELND B O	42 01 59 N 42 59 25 N 42 01 59 N -2 37 03 N 41 25 30 N	265 22 00 272 01 15 266 22 00 282 30 26 278 10 18	305 305 155 245	10 50 27.00 10 50 33.00 10 51 21.00 10 51 40.00 10 52 20.00	048 30 00 012 25 00 * 061 30 00 328 06 00 011 12 00 *	11 30 00 53 40 0D * 11 00 00 59 15 00 45 00 00 *	562
MIL RAD MASS MLWKEE B WIS OAYTON B O MIL RAD MASS	42 37 03 N 42 59 25 N 39 50 14 N 42 37 03 N	288 30 28 272 01 15 275 44 03 288 30 28	155 249 155	10 52 43.00 10 53 02.00 10 53 07.00	335 42 00 011 17 00 * 011 28 00 *	84 18 00 19 40 00 # 16 48 00 #	945
MIL RAD MASS	42 37 03 N	288 30 28	155	10 55 19.00 10 56 13.00	146 45 0C 147 15 00	42 36 00 31 42 00	73 <del>9</del> 89 9
SACMTO E CAL SACMTO E CAL PRET B S AF JOHBG C S AF	42 37 03 N 38 32 55 N 38 32 55 N 25 43 43 S 26 07 00 S	289 30 28 239 14 51 238 14 51 028 12 42 028 00 00	155 15 15 1311 1615	10 58 03.00 12 26 29.30 12 29 22.10 16 41 24.70 16 41 33.40	147 36 00 014 30 57 * 012 30 11 * 002 52 00 * 001 51 00 *	18 42 00 55 34 00 * 33 26 00 * 75 24 00 *	1218
UNION JOHSBG PRET P S AF	26 10 55 S 25 43 43 S	028 04 30 028 12 42	1606 1311	16 41 50.00	001 05 00 +	- 67 48 00 * - 55 30 00 *	
			15 OCT 1958	16 42 22.70	000 49 00 *	<b>-</b> 17 36 00 *	
HILVRSM NETH HILVRSM NETH SPETSAI I GR SPETSAI I GR SPETSAI I GR	52 12 23 N 52 12 23 N 37 16 30 N 37 16 30 N 37 16 30 N	005 10 05 005 10 05 023 09 00 023 09 00 023 09 00		03 03 13.12 03 24 55.10 03 06 45.00 03 08 07.00 03 10 28.50	012 46 30 * 011 15 4ē * 013 31 00 * 012 33 00 * 011 45 00 *	55 06 00 # 32 42 00 # 54 00 00 # 40 30 00 #	
ORFDNESS ENG MILLHILL ENG MILLHILL ENG ORFONESS ENG STEENWK NETH	52 06 00 N 51 37 00 N 51 37 00 N 52 06 00 N 52 47 29 N	001 36 00 359 46 00 359 46 00 001 36 00 006 06 35		04 40 52.80 04 42 13.70 04 42 21.20 04 42 22.10 04 42 24.90	327 48 00 002 30 00 * 007 10 00 * 345 12 00 001 51 00 *	34 00 00 # 34 00 00 89 36 00 # 87 42 00 # 59 00 00	
MILLHILL ENG ORFDNESS ENG HARROGTE ENG ORFDNESS ENG HILVRSM NETH	51 37 00 N 52 06 CO N 53 59 00 N 52 C6 00 N 52 12 23 N	359 46 00 001 36 00 358 26 00 001 36 00 005 10 05		04 42 30.95 04 43 45.60 04 44 29.00 04 44 34.20 04 45 27.70	008 40 00 * 057 12 00 009 10 00 * 102 12 00	63 36 00 # 83 54 00 # 69 00 00 28 00 00 # 55 00 00	
HILVRSM NETH HILVRSM NETH ORFONESS ENG HILVRSM NETH HILVRSM NETH	52 12 23 N 52 12 23 N 52 06 00 N 52 12 23 N 52 12 23 N	005 10 05 005 10 05 001 36 00 005 10 05 005 10 05		04 45 36.90 04 45 45.10 04 45 48.80 04 45 55.30 04 46 04.50	008 18 54 *  008 24 30 *  008 30 06 *  115 09 00  008 35 36 *  008 41 12 *	32 42 00 * 30 18 00 * 27 00 00 * 37 00 00 23 36 00 *	
ORFDNESS ENG DAYTON B O OAYTON B O AMES A IOWA WICHITA KAN	52 06 00 N 39 50 14 N 39 50 14 N 42 D1 59 N 37 41 44 N	D01 36 00 275 44 03 275 44 03 266 22 00 262 45 19		04 48 50.60 09 36 38.50 09 37 08.00 11 13 59.00 11 14 11.40	125 48 00 013 36 46 # 040 39 00 357 00 00 016 55 00 #	20 12 00 * 16 00 00 50 48 00 * 14 27 00 26 00 03	
AMES A IOWA AMES IOWA	42 01 59 N 42 D1 49 N	266 22 00 266 20 59	305	11 15 13 • 00 11 16 26 • 00	015 00 00 011 34 26 *	67 36 00 * 35 30 00 59 43 40 *	

STATION	LATITUDE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			15 OCT 1958	(CONT)			
AMES A IOWA MANHTN B KAN MANHTN B KAN MANHTN B KAN MANHTN B KAN	42 01 59 N 39 13 51 N 39 13 51 N 39 13 51 N 39 13 51 N	266 22 00 263 22 54 263 22 54 263 22 54 263 22 54	305 409 409 409 409	11 16 26.00 11 16 27.00 11 16 27.40 11 17 03.00 11 17 31.00	043 00 00 012 44 47 * 012 43 00 * 012 16 53 * 012 01 21 *	41 30 00 55 12 00 * 55 18 00 * 42 00 00 * 42 30 00 *	
MANHTN 8 KAN OAYTON B O TERRHAUT INO AMES A IOWA AMES A IOWA	39 13 51 N 39 50 14 N 39 31 38 N 42 01 59 N 42 01 59 N	263 22 54 275 44 03 272 36 10 266 22 00 266 22 00	409 249 155 305 305	11 17 59.00 11 18 12.00 11 18 16.30 11 18 26.00 11 19 03.50	011 49 19 * 039 37 00 045 00 00 00 00 00 00 00 00 00 00 00 00 00	36 36 00 * 65 17 00 46 30 00 35 00 00 31 00 00	
TERRHAUT INO MANHTN B KAN AMES A IOWA AMES A IOWA SACMTO E CAL	39 31 38 N 39 13 51 N 42 01 59 N 42 01 59 N 36 32 55 N	272 36 10 263 22 54 266 22 00 266 22 00 238 14 51	155 409 305 305 15	11 19 23 • 40 11 19 32 • 00 11 19 40 • 50 11 20 27 • 50 12 53 37 • 80	097 00 00 011 30 00 * 103 00 00 109 00 00 013 26 42 *	46 00 00 # 26 48 00 22 00 00 # 60 12 00 #	
EOW AF C CAL EDW AF C CAL SACMTO E CAL EDW AF C CAL EOW AF C CAL	34 59 52 N 34 59 52 N 38 32 55 N 34 59 52 N 34 59 52 N	242 09 04 242 09 04 238 14 51 242 09 04 242 09 04	706 706 15 706 706	12 54 34.00 12 55 34.00 12 55 38.40 12 56 29.00 12 56 34.00	027 31 12 042 51 07 011 53 08 * 057 27 00 058 46 12	24 36 00 27 25 36 35 43 00 * 28 04 48 28 00 00	
EDW AF C CAL EDW AF C CAL EDW AF C CAL EDW AF C CAL EOW AF C CAL	34 59 52 N 34 59 52 N 34 59 52 N 34 59 52 N 34 59 52 N	242 09 04 242 09 04 242 09 04 242 09 04 242 09 04	706 706 706 706 706	12 57 34.00 12 58 34.00 12 58 55.00 12 59 34.00 13 00 34.00	073 39 36 086 18 00 089 56 24 096 36 00 103 08 24	26 07 12 22 68 36 21 45 36 19 00 36 15 13 48	
EOW AF C CAL EOW AF C CAL EOW AF C CAL EOW AF C CAL UNION JOHSBG	34 59 52 N 34 59 52 N 34 59 52 N 34 59 52 N 26 10 55 S	242 09 04 242 09 04 242 09 04 242 09 04 028 04 30	706 706 706 705 1806	13 01 34.00 13 02 34.00 13 03 34.00 13 04 34.00 17 07 44.20	109 36 00 113 39 00 117 25 12 120 12 36 016 05 00 *	11 31 12 08 06 36 04 58 12 02 01 48	
JOHRG C S AF ASAHIKAWA J ASAHIKAWA J ASAHIKAWA J ASAHIKAWA J	26 07 00 S 43 46 27 N 43 46 27 N 43 46 27 N 43 46 27 N	028 00 00 142 21 50 142 21 50 142 21 50 142 21 50	1615 113 113 113 113	17 08 16.50 19 24 19.00 19 24 59.00 19 26 24.00 19 27 18.00	016 54 00 # 011 10 00 # 010 48 00 # 010 30 00 # 010 28 00 #	18 18 00 * 56 00 00 * 43 00 00 * 19 00 00 *	
			16 OCT 1958				
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	03 26 06.80 03 26 17.50 03 26 28.20 03 26 46.00 03 26 57.60	285 42 00 284 00 00 282 06 00 276 24 00 275 42 00	22 16 00 23 48 00 25 18 00 28 00 00 29 42 00	
OKNN OB EIN JOKNN OB EIN JOKNN OB EIN JOKNN OB EIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 107 103 103 103	03 27 0°•10 03 27 22•70 03 27 36•50 03 27 50•00 03 28 06•50	273 00 00 268 48 00 263 24 00 259 30 00 252 42 00	31 18 00 33 30 00 36 00 00 37 36 00 39 36 00	
JOKNN 03 FIN JOKNN 08 FIN JOKNN 08 FIN COPNGN 8 OEN JOKNN 08 FIN	60 48 50 N 60 48 50 N 60 48 50 N 55 42 13 N 60 48 50 N	023 30 09 023 30 09 023 30 09 012 27 09 023 30 09	103 103 103 10 10	03 28 25.70 03 28 37.90 03 29 45.40 03 29 50.00 03 29 53.40	244 96 00 238 24 00 206 12 00 908 15 00 *	41 24 00 42 12 00 40 48 00 38 30 00 * 39 54 00	
COPNGN B DEN ATHENS GR COPNGN B DEN COPNGN B DEN ATHENS GR	55 42 13 N 37 58 19 N 55 42 13 N 55 42 13 N 37 58 19 N	012 27 09 023 43 01 012 27 09 012 27 09 023 43 01	10 110 10 10 10	03 29 54.69 03 30 10.90 03 30 28.04 03 31 06.04 03 31 05.90	908 18 00 * 352 18 00 008 36 30 * 008 45 30 *	35 57 00 * 16 48 00 25 42 00 * 16 18 00 * 22 54 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	03 32 02.90 03 32 29.90 03 33 25.90 03 34 20.90 03 35 06.90	010 18 00 017 06 00 034 24 00 056 42 00 075 24 00	31 00 00 33 36 00 39 30 00 42 06 00 40 30 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	03 35 53.90 03 36 39.90 03 37 24.60 03 38 02.90 03 38 39.90	089 48 00 101 18 00 108 54 00 113 48 00 117 48 00	36 42 00 30 36 00 26 54 00 23 06 00 20 18 00	
DAYTON B O WASH WESN DC DAYTON B O	39 50 14 N 38 50 00 N 39 50 14 N	275 44 03 282 59 24 275 44 03	249 249	09 59 48.00 10 00 32.00 10 00 48.00	016 56 00 * 018 24 00 * 014 55 00 *	66 36 00 * 74 42 00 * 66 20 00 *	

STATION	LATITUDE	LONGITUDE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OP RGT ASCEN #	ELEVATION OR DECLINATION	SLANT PANGE IN KM
		:	16 OCT 1958	(CONT)			
DAYTON B O DAYTON B O DAYTON B O WASH WLSN OC CLEVELND A O	39 50 14 N 39 50 14 N 39 50 14 N 38 50 00 N 41 29 46 N	275 44 03 275 44 03 275 44 03 282 59 24 278 12 16	249 249 249 220	10 01 24.50 10 02 00.00 10 02 06.00 10 02 14.00 10 02 27.00	028 13 00 012 57 00 * 012 55 0C * 014 30 00 * 012 05 00 *	24 01 00 56 36 00 * 55 48 00 * 75 48 00 * 55 00 00 *	
N CANTON A O WASH WLSN OC OAYTON B O DAYTON B O DAYTON B O	40 55 54 N 38 50 00 N 39 50 14 N 39 50 14 N 39 50 14 N	278 32 40 282 59 24 275 44 03 275 44 03 275 44 03	366 249 249 249	10 02 31.50 10 03 32.00 10 05 01.80 10 05 37.50 10 05 41.00	012 12 00 * 011 51 00 * 011 25 00 * 010 13 00 * 010 11 00 *	55 55 00 * 59 18 00 * 20 48 00 * 15 12 00 * 14 30 00 *	
CLEVELND A O WASH WLSN OC WASH WLSN DC WICHITA KAN BTLSVL A OKL	41 29 46 N 38 50 00 N 38 50 00 N 37 41 44 N 36 42 18 N	278 12 16 282 59 24 282 59 24 262 45 19 264 03 36	220 413 213	10 05 53.00 10 05 58.00 10 07 05.00 11 39 49.50 11 40 19.00	010 59 00 # 010 58 00 # 010 44 00 # 018 48 46 # 000 00 00	20 30 00 # 20 18 00 # 07 48 00 # 81 42 00 # 31 00 00	
MANHATTN KAN ALBUG A NM DENVR A COLO MANHATTN KAN BTLSVL—A OKL	39 09 45 N 35 05 03 N 39 44 52 N 39 09 45 N 36 42 18 N	263 31 09 253 21 24 255 03 24 263 31 09 264 03 36	311 1520 1625 311 213	11 40 20 00 11 40 42 00 11 41 34 00 11 41 53 00 11 42 18 00	012 C4 00 * 013 10 00 * 065 30 00 010 15 00 * 010 30 00 *	87 24 00 * 55 48 00 * 32 00 00 56 48 00 * 59 30 00 *	
BTLSVL A OKL MANHTN B KAN ALBUO A NM MANHATTN KAN BTLSVL A OKL	36 42 15 N 39 13 51 N 35 05 03 N 39 09 45 N 36 42 18 N	264 03 36 263 22 54 253 21 24 253 31 09 264 03 36	213 409 1520 311 213	11 43 16.00 11 44 09.60 11 44 18.00 11 44 19.00 11 44 27.00	010 28 00 # 010 08 54 # 011 33 00 # 010 07 00 # 010 33 00 #	39 30 00 # 13 34 12 # 17 00 00 # 11 90 00 # 20 15 00 #	
ALRUO À NM EL PASO TEX MANHTN B KAN WLNTCK B CAL SACMTO E CAL	35 05 03 N 31 49 41 N 39 13 51 N 37 57 52 N 38 32 55 N	253 21 24 253 36 36 263 22 54 237 56 14 238 14 51	1520 409 9 15	11 44 35.00 11 44 37.30 11 45 05.00 13 17 23.00 13 19 28.10	011 31 00 * 073 00 00 119 07 36 018 30 00 * 010 25 45 *	14 30 00 * 17 00 00 31 31 12 83 06 00 * 56 11 00 *	
SACMTO E CAL WLNTCK B CAL VAN NUYS CAL EDW AF D CAL EDW AF D CAL	38 32 55 N 37 57 52 N 34 14 22 N 34 56 43 N 34 56 43 N	238 14 51 237 56 14 241 24 45 242 04 58 242 04 58	15 9 276 785 785	13 20 10.20 13 20 19.00 13 22 32.00 13 22 33.00 13 23 33.00	010 19 40 * 010 31 18 * 090 00 00 099 14 24 144 36 00	41 46 00 # 41 30 00 # 47 00 00 47 44 24 37 51 18	
EDW AF D CAL EDW AF D CAL EDW AF D CAL EDW AF D CAL EDW AF D CAL	34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	242 04 58 242 04 56 242 04 56 242 04 58 242 04 58	785 785 785 785 785	13 24 33.00 13 25 33.00 13 26 33.00 13 27 33.00 13 28 33.00	122 57 54 128 31 48 133 21 00 134 58 48 137 00 36	29 26 24 22 27 36 16 46 48 12 36 00 07 58 00	
MAPAL OYAOT NAPAL OYAOT OYAOT OYAOT OYAOT OYAOT OYAOT OYAOT OYAOT	35 40 11 N 35 40 11 N 35 40 11 N 35 00 15 N 35 00 15 N	139 32 28 139 32 28 139 32 28 136 39 00 136 39 00	58 58 58 3	19 47 17.35 19 48 12.67 19 48 51.14 19 49 05.00 19 50 35.00	019 05 00 * 015 00 00 * 012 24 00 * 012 33 00 *	81 13 00 1 75 30 00 1 64 00 00 1	•
HGSHMTSYMA J ASAHIKAWA J ASAHIKAWA J HGSHMTSYMA J	36 02 22 N 43 46 27 N 43 46 27 N 36 02 22 N	139 23 54 142 21 50 142 21 50 139 23 54	31 113 113 31	19 50 38.00 19 50 41.00 19 52 20.00 19 53 60.00	010 51 00 4 003 27 00 4 009 15 00 4 010 35 00	09 00 00 1 - 11 00 00 1	•
			17 OCT 1				
MIL RAO MASS MIL RAD MASS MIL RAO MASS MIL RAO MASS MIL RAD MASS	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N	288 30 28 268 30 28 288 30 28 288 30 28 288 30 28	155 155 155 155 155	01 54 37.20 01 55 38.40 01 58 13.20 01 58 36.90 01 59 10.60		05 06 00 16 18 00 33 30 00 26 36 00 20 18 00	1346 947 732 784 955
LNOSTRT NETH MEUDON FR ORFDNESS ENG MEUDON FR MEUDON FR	48 48 18 N	004 44 58 002 13 52 001 36 00 002 13 52 002 13 52	162 162 162	02 11 55.82 03 49 24.00 03 49 29.00 03 49 41.30 03 49 54.30	339 46 00 334 30 00 342 13 00	* 51 48 00 19 06 00 29 00 00 21 15 00 23 03 00	*
MILLHILL ENG MILLHILL ENG MEUOON FR FARNHAM ENG MILLHILL ENG	51 37 00 N 48 48 18 N 51 12 00 N	359 46 00 002 13 52 359 12 00	162	03 50 08.50 03 50 08.51 03 50 13.00 03 50 16.00 03 50 18.10	018 50 00 347 27 00 018 20 00	* 75 00 00 25 36 00 * 73 30 00	•
MILLHILL ENG MEUDON FR MILLHILL ENG MILLHILL ENG ORFONESS ENG	48 48 18 N 51 37 00 N 51 37 00 N	002 13 52 359 46 00 359 46 00	162	03 50 27.50 03 50 29.20 03 50 36.80 03 50 45.80 03 50 47.50	350 38 00 016 25 00 010 56 00	28 00 00 * 80 18 00	•

STATION	LATITUOE	LONGITUOE FAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION#	SLANT RANGE IN KM
FARNHAM ENG MEUDON FR	51 12 00 N 48 48 18 N	359 12 00	17 OCT 1958	03 50 48.00 .	015 46 00 *	78 12 00 *	
MEUOON FR MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162	03 50 48.20 03 50 59.60 03 51 13.70 03 51 32.50	355 05 00 358 06 00 002 12 00 008 27 00	30 53 00 32 41 00 34 47 00 37 32 00	
MEUDON FR ORFONESS ENG MILLHILL ENG MEUOON FR MEUOON FR	48 48 18 N 52 06 00 N 51 37 00 N 48 46 18 N 48 48 18 N	002 13 52 001 36 00 359 46 00 002 13 52 002 13 52	162 162 162	03 51 52.40 03 51 58.10 03 51 59.40 03 52 08.30 03 52 21.20	016 08 00 034 42 00 010 43 00 * 023 03 00	40 10 00 55 00 00 67 48 00 * 41 51 00	
MEUDON FR MEUOON FR ORFONESS ENG MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 52 06 00 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 001 36 00 002 12 52 002 13 52	162 162 162 162	03 52 36 30 03 52 48 60 03 52 56 00 03 53 05 90 03 53 22 90	029 02 00 036 25 00 042 05 00 074 36 00 050 56 00	42 57 00 43 48 00 44 02 00 49 00 00 43 51 00	
MEUDON FR ORFDNESS ENG MEUOON FR MEUDON FR MEUOON FR	48 48 18 N 52 06 00 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 001 36 00 002 13 52 002 13 52 002 13 52	162 162 162 162	03 53 42.70 03 53 57.60 03 54 00.60 03 54 19.60 03 54 46.30	C67 24 00 103 18 00 074 12 00 080 20 00 087 38 00	42 59 00 41 25 00 31 00 00 39 27 00 37 12 00 33 45 00	
MEUDON FR ORFONESS ENG MEUOON FR MEUDON FR MEUOON FR	48 48 18 N 52 06 00 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 001 36 00 002 13 52 002 13 52 002 13 52	162 162 162	03 55 06.20 03 55 16.40 02 55 25.90 03 55 42.80 03 56 02.00	092 01 00 113 30 00 095 46 00 098 33 00 101 17 00	31 20 00 21 00 00 28 55 00 26 56 00 24 46 00	
MEUOON FR MEUOON FR ORFDNESS ENG MEUOON FR MEUDON FR	48 48 18 N 48 48 18 N 52 06 00 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 001 36 00 002 13 52 002 13 52	162 162	03 56 20.70 03 56 39.10 03 56 45.70 03 56 57.00 03 57 15.20	103 37 00 105 37 00 119 06 00 107 22 00 108 58 00	22 58 00 20 55 00 13 00 00 19 30 00 17 36 00	
MEUOON FR ORFONESS ENG MEUDON FR MEUDON FR MEUOON FR	48 48 18 N 52 06 00 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 001 36 00 002 13 52 002 13 52 002 13 52	162 162 162	03 57 34.30 03 57 41.20 01 7 93.60 03 md 12.70 03 58 31.50	110 17 00 119 39 00 111 48 00 113 03 00 114 07 00	16 00 00 04 00 00 14 24 00 12 59 00 11 37 00	
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 167 162 162 162	03 58 50.60 03 57 08.90 03 59 25.60 03 5 54.30 04 00 22.30	115 07 00 116 01 00 116 47 00 117 57 00 118 58 00	10 16 00 09 02 00 07 59 00 06 14 00 04 36 00	
MEUOON FR MEUOON FR MEUOON FR MEUOON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 46 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 167 162 162 162	05 29 27.50 05 29 41.20 05 29 56.30 05 70 05.90 05 30 17.00	305 14 00 303 47 00 302 02 00 300 52 00 299 18 00	19 08 00 20 29 00 22 37 00 23 42 00 25 15 00	
MEUOON FR	52 06 00 N 48 48 18 N 48 48 28 N 48 48 18 N 48 48 18 N	001 36 00 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162	05 30 26.70 05 30 34.30 05 30 45.60 05 30 57.50 05 31 11.00	282 12 00 296 39 00 294 45 00 291 58 00 289 28 00	32 00 00 27 47 00 29 30 00 31 36 00 33 31 00	.30
MEUDON FR ORFONESS ENG MEUOON FR MEUOON FR MEUOON FR	48 48 18 N 52 06 00 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 001 36 00 002 13 52 002 13 52 002 13 52	162 162 162 162	05 31 26.30 05 31 39.10 05 31 39.90 05 31 59.80 05 32 14.20	285 43 00 259 00 00 280 00 00 275 22 00 269 57 00	35 55 00 42 00 00 38 08 00 41 12 00 43 13 00	
MEUOON FR ORFONESS ENG MEUOON FR MEUOON FR CHELMSFO ENG	48 48 18 N 52 06 00 N 48 48 18 N 48 48 18 N 51 43 00 N	002 13 52 001 36 00 002 13 52 002 13 52 000 30 00	162 162 162	05 32 29.60 05 32 30.00 05 32 43.00 05 33 04.30 05 33 13.00	263 26 00 221 30 00 257 09 00 246 27 00 005 34 00 #	45 05 00 39 00 00 46 28 00 47 48 00 09 00 00 #	
MEUOON FR MEUOON FR MEUDON FR ORFONESS ENG MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 52 06 00 N 48 48 18 N	002 13 52 002 13 52 002 13 52 001 36 00 002 13 52	162 162 162	05 33 17.70 05 33 30.60 05 33 44.00 05 33 44.00 05 33 58.80	239 47 00 233 06 00 226 27 00 199 00 00 219 36 00	48 07 00 47 57 00 47 18 00 33 00 00 46 01 00	
MEUOON FR MEUOON FR MEUOON FR ORFDNESS ENG MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 52 06 00 N 48 48 18 N	002 13 52 002 13 52 002 13 52 001 36 00 002 13 52	162 162 162 162	05 34 21.30 05 24 34.70 05 34 45.30 05 34 48.60 05 34 55.30	210 16 00 205 31 00 202 07 00 175 57 00 199 11 00	43 47 00 42 11 00 40 48 00 10 00 00 39 27 00	

STATION	LATITUOE	LONG ÉTUDE EAST	HFIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			17 OCT 1958	(CONT)			
ORFONESS ENG MEUOON FR MEUOON FR MEUOON FR MEUDON FR	52 06 00 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	001 36 00 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162	05 34 59•70 05 35 06•30 05 35 23•30 05 35 38•70 05 35 50•20	183 12 00 196 13 00 192 15 00 189 05 00 186 58 00	24 00 00 37 54 00 34 32 00 33 27 00 31 53 00	
MEUOON FR MEUOON FR MEUDON FR MEUDON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	05 36 01.80 05 36 11.80 05 36 25.50 05 36 37.20 05 36 52.30	184 59 00 183 31 00 181 41 00 180 16 00 178 36 00	30 26 00 29 10 00 27 31 00 26 08 00 24 25 00	
MEUDON FR MEUOON FR MEUOON FR MEUDON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 13 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	05 37 02.60 05 37 18.90 05 37 31.90 05 37 43.20 05 37 56.90	177 33 00 174 03 00 174 55 00 174 05 00 173 05 00	23 30 00 21 38 00 20 21 00 19 16 00 18 00 00	
MEUDON FR MEUOON FR MEUOON FR MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	05 38 09.20 05 38 21.10 05 38 36.80 05 38 48.60 05 39 06.80	172 16 00 171 32 00 179 38 00 169 59 00 168 09 00	16 56 00 15 57 00 14 39 00 13 41 00 12 20 00	
ORFDNESS ENG OAYTON B O OAYTON B O OAYTON B O AMES A IOWA	52 06 00 N 39 50 14 N 39 50 14 N 39 50 14 N 42 01 59 N	001 36 00 275 44 03 275 44 03 275 44 03 266 22 00	249 249 249 305	05 39 35.50 08 46 06.50 08 49 03.00 05 50 01.00 10 21 26.00	166 18 00 048 48 00 011 52 00 * 011 35 00 *	07 00 00 10 20 00 13 30 00 * 08 30 00 * 18 30 00	
AMES A IOWA AMES A IOWA OAYTON B O AMES IOWA AMES IOWA	42 01 59 N 42 01 59 N 39 50 14 N 42 01 49 N 42 01 49 N	265 22 00 266 22 00 275 44 03 266 20 59 266 20 59	305 305 249	10 22 21.00 10 22 59.00 10 23 39.50 10 23 44.00 10 24 03.00	011 00 00 021 00 00 358 06 00 012 47 58 * 012 22 00 *	24 00 00 27 00 00 28 06 00 60 46 10 * 56 53 19 *	
AMES A IOWA AMES IOWA DAYTON B O AMES A IOWA DAYTON B O	42 01 59 N 42 01 49 N 39 50 14 N 42 01 59 N 39 50 14 N	266 22 00 266 20 59 275 44 03 266 22 00 275 44 03	305 249 305 249	10 24 03.00 10 24 39.00 10 24 53.20 10 24 59.00 10 25 26.00	041 00 00 011 46 55 * 012 05 00 * 057 00 00 010 45 00 *	30 48 00 48 38 22 4 78 30 00 4 31 00 00 67 00 00 4	•
AMES A IOWA ST COLL PA ST COLL P PA AMES A IOWA N Y C A NY	42 01 59 N 40 44 01 N 40 44 00 N 42 01 59 N 40 45 28 N	266 22 00 282 06 33 282 06 33 266 22 00 286 01 15	305 393 393 305 259	10 25 54.00 10 26 07.00 10 26 08.00 10 26 42.00 10 26 43.00	073 00 00 006 56 13 * 006 56 14 * 084 00 00 005 15 00 *	27 39 00 66 00 00 4 66 00 00 4 25 00 00 49 30 00	•
DAYTON B O CHI FAXN ILL AMES A IOWA ST COLL P PA N Y C A NY	39 50 14 N 41 59 00 N 42 01 59 N 40 44 00 N 40 45 28 N	275 44 03 277 21 00 266 27 00 282 06 33 286 01 15	249 218 305 393 259	10 26 53.00 10 27 00.29 10 27 18.00 10 27 28.00 10 27 54.00	010 23 00 * 090 00 00 091 00 00 090 00 00 007 41 00 *	41 00 00 4 37 00 00 22 00 00 73 00 00 32 40 00	
DAYTON 8 O N Y C A NY AMES A IOWA BRISTOL TENN ALBUO-GS NM	39 50 14 N 40 45 28 N 42 01 59 N 36 35 03 N 35 06 22 N	275 44 03 286 01 15 266 22 00 277 50 31 253 23 14	249 259 305 527 1565	10 27 55.00 10 27 55.00 10 27 55.00 10 28 33.00 11 04 58.00	010 12 00 * 007 50 00 * 096 00 00 00 00 00 00 00 012 43 00		
ALBUQ-GS NM MANHTN B KAN MANHTN B KAN DENVR A COLO EDW AF C CAL	35 D6 22 N 39 13 51 N 39 13 51 N 39 44 52 N 34 59 52 N	253 23 14 263 22 54 263 22 54 255 03 24 242 09 04	1565 409 409 1625 706	11 05 16.D0 11 44 10.00 11 45 05.00 12 02 18.00 12 04 04.00	012 22 00 010 08 54 # 119 17 00 357 00 00 053 45 00	58 24 00 13 30 00 31 53 00 47 30 00 19 53 24	*
ALBUO-GS NM EL PASO TEX ALBUO-GS NM EDW AF C CAL ALMGRDO A NM	35 06 22 N 31 49 41 N 35 06 22 N 34 59 52 N 32 52 23 N	253 23 14 253 36 36 253 23 14 242 09 04 254 02 57	1565 1565 706 1335	12 04 30.00 12 04 31.50 12 04 48.00 12 04 56.00 12 04 57.00	065 10 12	32 00 00 56 00 00 18 58 48	*
ALMGRDO A NM KANCITY MO EDW AF C CAL ALMGRDO A NM WHTIER A CAL	32 52 23 N 39 02 02 N 34 59 52 N 32 52 23 N 33 58 40 N	254 02 57 265 25 08 242 09 04 254 02 57 241 58 25	1335 259 706 1335 149	12 05 16.00 12 05 21.00 12 05 56.00 12 06 11.00 12 06 11.00	270 00 00 076 06 00 010 59 12	66 00 00 17 00 00 40 48 00	*
ALMGRDO A YM ORGN PASS NM ORGN PASS NM ORGN PASS NM EDW AF C CAL	32 52 23 N 32 25 24 N 32 25 24 N 32 25 24 N 34 59 52 N	254 02 57 253 26 51 253 26 51 253 26 51 253 26 51 242 D9 04	. 1651 1651 <b>165</b> 1	12 06.29.00 12 06.36.40 12 06.40.40 12 06.48.40 12 06.56.00	010 57 42 010 56 54 010 55 30	* 34 40 00 * 33 40 00	*

STATION	LATITUDE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OP RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			17 OCT 1958	(CONT)			
EOW AF C CAL EOW AF C CAL EOW AF C CAL PORTLANO ORE SACMTO E CAL	34 59 52 N 34 59 52 N 34 59 52 N 45 29 19 N 38 32 55 N	242 09 04 242 09 04 242 09 04 237 22 27 238 14 51	706 706 706 46 15	12 07 32.00 12 07 56.00 12 08 56.00 13 38 41.00 13 42 04.40	090 00 00 092 46 30 098 56 06 001 31 00 * 005 30 48 *	12 44 24 11 30 36 03 33 36 49 00 CO * 53 55 00 *	
WLNTCK B CAL SNYVAL A CAL SACMTO E CAL	37 57 52 N 37 22 20 N 38 32 55 N	237 56 14 237 59 40 238 14 51	17 15	13 42 16.00 13 43 48.03 13 45 13.90	005 59 00 * 007 46 48 * 008 25 20 *	54 48 00 # 28 24 00 # - 03 32 00 #	
			18 OCT 1958				
THURSO SCOT HARROGTE ENG HARROGTE ENG HARROGTE ENG MEUDON FR	58 36 00 N 53 59 00 N 53 59 00 N 53 59 00 N 48 48 18 N	356 30 00 358 26 00 358 26 00 358 26 00 002 13 52	162	04 12 30.30 04 14 41.00 04 14 51.00 04 15 00.00 04 15 12.50	004 55 CO # 007 40 00 # 007 45 00 # 007 51 CC # 057 02 0C	41 00 00 # 31 00 00 # 27 00 00 # 24 30 00 # 72 32 00	
GRONNGN NETH MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	53 12 18 N 48 48 18 N 48 48 15 N 48 48 18 N 48 48 18 N	006 34 01 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162	04 15 29.60 04 15 35.40 04 16 04.00 04 16 24.40 04 16 49.00	006 14 18 * 087 38 00 105 28 00 113 05 00 118 58 00	22 24 00 * 68 27 20 61 02 00 55 02 00 48 16 00	
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	04 17 11.40 04 17 29.30 04 17 47.30 04 18 07.60 94 18 24.30	122 23 00 124 36 00 126 20 00 127 49 00 128 52 00	43 00 00 39 12 00 35 39 00 32 09 00 29 32 00	•
MEUOON FR MEUOON FR MEUDON FR MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	04 18 43.50 04 19 02.80 04 19 21.50 04 19 40.80 04 20 07.60	129 54 00 130 45 00 131 29 00 132 10 00 132 58 00	26 44 00 24 19 00 22 06 00 20 01 00 17 20 00	
N CANTON A O N CANTON A O N CANTON A O CINCNATI F O OAYTON B O	40 55 54 N 40 55 54 N 40 55 54 N 39 09 06 N 39 50 14 N	278 32 40 278 32 40 278 32 40 275 32 15 275 44 03	366 366 366 349	09 04 13:00 09 06 23:00 09 06 49:00 09:07 20:00 09:09 02:40	017 12 00 # 012 31 00 # 012 52 12 # 042 00 00 011 40 00 #	62 40 00 # 59 40 00 # 56 11 00 # 17 09 00 18 40 00 #	• •
OAYTON B O DAYTON B O OAYTON B O OUNLAP ONTAR AMES A 10WA	39 50 14 N 39 50 14 N 39 50 14 N 43 51 46 N 42 01 59 N	275 44 03 275 44 03 275 44 03 280 34 40 266 22 00	249 249 249 244 305	09 09 53.00 09 10 08.00 09 11 04.50 09 12 09.00 10 41 50.00	011 18 00 # 011 10 00 # 084 20 00 010 18 30 339 00 00	15 00 09 * 13 00 00 * 10 50 00 02 04 00 14 12 00	
AMES A 10WA AMES A 10WA AMES A 10WA MANHTN B KAN CINCNATI B 0	42 01 59 N 42 01 59 N 42 01 59 N 39 13 51 N 39 09 06 N	266 22 00 266 22 00 266 22 00 263 22 54 275 32 15	305 305 305 409	15 42 29.00 10 43 57.00 10 44 29.00 10 44 36.00 10 44 50.00	342 00 00 353 00 00 001 00 00 014 50 00 # 332 00 00	19 00 00 31 12 00 31 48 00 75 42 00 27 00 00	
MLWKEE 8 WIS OAYTON B O PITTSBGH PA AMES A IOWA AMES 10WA	42 59 25 N 39 50 14 N 40 29 00 N 42 01 59 N 42 01 49 N	272 01 15 275 44 03 280 00 00 266 22 00 266 20 59	249 381 305	10 44 56.00 10 44 58.00 10 45 00.00 10 45 24.00 10 45 51.00	001 35 00 * 331 54 00 320 21 00 019 00 00 00 00 00 55 46 *	29 32 00 26 03 00 48 06 00	
OAYTON B O OAYTON B O AMES IOWA WICHITA KAN AMES A IOWA	39 50 14 N 39 50 14 N 42 01 49 N 37 41 44 N 42 01 59 N	275 44 03 275 44 03 266 20 59 262 45 19 266 22 00	249 413	10 45 55.00 10 46 03.60 10 46 19.00 10 46 20.20 10 46 29.00	001 53 00 * 002 10 00 * 009 48 03 * 011 55 00 * 057 00 00	68 50 00 55 08 58	*
AMES 10WA AMES 10WA AMES A 10WA N CANTON A O TERRHAUT IND	42 01 49 N 42 01 49 N 42 01 59 N 40 55 54 N 39 31 38 N	266 20 59 266 20 59 266 22 00 278 32 40 272 36 10	305 366	10 46 37.00 10 47 14.09 10 47 16.00 10 47 32.00 10 47 40.00	009 42 08 1 083 00 00 005 08 00 1	35 34 44 49 54 00	*
MLWKEE A WIS N CANTON A O AMES A IOWA LANSG B MICH N CANTON A O	42 58 07 N 40 55 54 N 42 01 59 N 42 43 00 N 40 55 54 N		366 305	10 47 42.00 10 47 43.00 10 48 02.00 10 48 08.90 10 48 35.50	005 25 00 100 00 00 007 17 40	* 40 57 00 42 30 00 * 22 03 34	*
TERRHAUT IND DAYTON B O DAYTON B O MLWKEE B WIS PITTSBGH PA	39 50 14 N 39 50 14 N	275 44 0: 275 44 0: 272 01 1:	3 249 3 249 5	10 48 36.00 10 48 38.00 10 48 45.80 10 49 06.00 10 50 00.00	0 007 36 00 0 007 28 00 0 008 40 00	* 30 15 00	*

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION#	SLANT RANGE IN KM
<b>5</b> 1 <b>5</b> 1.			18 OCT 1958				Til,
DANVILLE ILL MLWKEE B WIS MANHTN A KAN EDW AF D CAL EDW AF D CAL	40 08 57 N 42 59 25 N 39 15 58 N 34 56 43 N 34 56 43 N	272 22 26 272 01 15 263 22 38 242 04 58 242 04 58	189 408 785 785	10 50 07,50 10 51 17,00 11 44 36,00 12 22 19,00 12 23 19,00	130 42 00 008 57 00 * 014 50 00 * 355 49 48 015 12 36	39 48 00 - 19 20 00 * 75 42 00 * 25 04 12 27 24 00	
TUCSON ARIZ EDW AF D CAL EDW AF D CAL DENVR A COLO ORGN PASS NM	32 13 59 N 34 56 43 N 34 56 43 N 39 44 52 N 32 25 24 N	249 03 51 242 04 58 242 04 56 255 03 24 253 26 51	227 785 785 1625 1651	12 24 05.00 12 24 19.00 12 25 19.00 12 25 32.00 12 25 58.03	016 57 00 # 030 42 00 050 27 00 273 00 00 006 05 12 #	87 44 00 * 33 01 12 35 57 36 71 00 00 72 49 00 *	
ORGN PASS NM ALBUG S NM EDW AF D CAL ALBUG A NM ORGN PASS NM	32 25 24 N 35 03 18 N 34 56 43 N 35 05 03 N 32 25 24 N	253 26 51 253 23 30 242 04 58 253 21 24 253 26 51	1651 1618 785 1520 1651	12 26 16.04 12 26 17.00 12 26 19.00 12 26 42.00 12 26 44.05	006 47 48 * 000 00 00 070 49 48 007 27 00 * 007 32 30 *	68 37 00 * 71 00 00 35 16 12 46 00 00 # 59 27 00 *	
ALBUO-GS NM ALBUO A NM ALMGRDO A NM ALBUO A NM EDW AF D CAL	35 06 22 N 35 05 03 N 32 52 23 N 35 05 03 N 34 56 43 N	253 23 14 253 21 24 254 02 57 253 21 24 242 04 58	1565 1520 1335 1520 785	12 27 00.00 12 27 03.00 12 27 10.00 12 27 12.00 12 27 19.00	007 43 00 * 007 57 00 * 007 44 24 * 090 00 00 087 33 00	38 42 00 # 35 00 00 # 49 24 00 * 78 00 00 30 58 48	
ALBUO A NM VAN NUYS CAL ALMGROO A NM EDW AF D CAL ALMGRDO A NM	35 05 03 N 34 14 22 N 32 52 23 N 34 56 43 N 32 52 23 N	253 21 24 241 24 45 254 02 57 242 04 58 254 02 57	1520 276 1335 785 1335	12 27 21.00 12 27 40.00 12 27 56.00 12 26 19.00 12 28 24.00	008 07 00 * 090 00 00 008 20 30 * 108 36 00 008 33 06 *	29 00 00 * 29 00 00 31 48 00 * 20 33 00 22 12 00 *	
ALMGRDO A NM EL PASO TEX EOW AF D CAL EOW AF D CAL EOW AF O CAL	32 52 23 N 31 49 41 N 34 56 43 N 34 56 43 N 34 56 43 N	254 02 57 253 36 36 242 04 58 242 04 58 242 04 58	1335 785 785 785	12 28 51.00 12 29 26.50 12 30 19.00 12 31 19.00 12 32 19.00	008 45 42 * 124 00 00 115 06 00 119 46 48 123 13 12	13 00 C0 * 53 3C 00 15 47 24 11 30 00 07 54 00	
EOW AF O CAL EOW AF D CAL YOKKAICHI J YOKKAICHI J KAGOSHIMA J	34 56 43 N 34 56 43 N 35 00 15 N 35 00 15 N 31 31 34 N	242 04 58 242 04 58 136 39 90 136 39 00 130 31 47	785 785 3 3	12 33 19.00 12 34 03.00 18 52 39.00 18 56 28.00 20 33 23.00	126 19 48 127 54 00 012 41 00 * 011 05 00 * 008 31 00 *		•
KAGOSHIMA J	31 31 34 N	130 31 47	13	20 37 04.00	009 24 00 #	- 18 00 00 *	•
GRONNGN NETH GRONNGN NETH MEUDON FR MEUDON FR MEUDON FR	53 12 18 N 53 12 18 N 48 48 18 N 48 48 18 N 48 48 18 N	006 34 01 006 34 01 002 13 52 002 13 52 002 13 52	19 OCT 19 162 167 162	02 56 19.30 04 34 37.40 04 36 39.60 04 36 56.70 04 37 11.60	009 25 42 * 003 44 18 * 179 36 00 174 19 00 170 49 00		
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	04 37 27.00 04 37 40.10 04 37 55.12 04 38 10.30 04 38 25.20	167 59 00 166 00 00 164 07 00 162 35 00 161 19 00	44 23 00 41 35 00 38 29 00 35 38 00 33 05 00	
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 49 19 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	04 38 37.20 04 38 46.20 04 39 00.80 04 39 13.80 04 39 37.40	160 28 00 159 39 00 158 59 00 158 19 00 157 29 00	31 07 00 29 18 00 27 41 00 25 53 00 23 35 00	
MEUDON FR MEUDON FR OAYTON B O DUNLAP ONTAR CHI FAXN ILL	48 48 18 N 48 48 18 N 39 50 14 N 43 51 46 N 41 59 00 N	002 13 52 00 13 52 275 44 03 280 34 40 272 21 00	162 162 249 244 218	04 39 44.50 04 40 00.10 09 25 31.50 09 25 54.00 09 26 09.00	014 53 00 012 24 00	# 86 30 00	*
CHI FAXN ILL N CANTON A O CLEVELND A O DAYTON B O N CANTON A O	41 59 00 N 40 55 54 N 41 29 46 N 39 50 14 M 40 55 54 N	278 32 40 278 12 16 275 44 03	218 366 220 249 366	09 26 26.00 09 26 40.00 09 27 06.00 09 27 08.00 09 27 10.00	012 08 00 011 10 66 011 54 00	* 70 30 00 * 61 30 00 * 56 42 00	* * * .
DAYTON B O CLEVELND A O N CANTON A O N CANTON A O N CANTON A O	39 50 14 N 41 29 46 h 40 55 54 N 40 55 54 N	278 12 16 278 32 40 278 32 40		09 27 14.00 09 27 29.00 09 27 31.00 09 28 25.00 09 28 50.00	010 55 00 011 02 00 010 31 00	* 56 24 00 * 40 45 00	*
DUNLAP ONTAR BALTIMORE MO				09 28 59•80 09 30 09•00		# 22 48 00 44 00 00	*

STATION	LATITUDE	LONGITU0E EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLIMATION*	SLANT RANGE IN KM
			19 OCT 1958	(CONT)			
CLEVELND A O OAYTON B O OAYTON B O DAYTON B O DAYTON B O	41 29 46 N 39 50 14 N 39 50 14 N 39 50 14 N 39 50 14 N	278 12 16 275 44 03 275 44 03 275 44 03 275 44 03	220 249 249 249 249	09 30 13.00 09 30 23.00 09 30 44.40 09 31 22.20 09 32 35.00	010 03 00 # 010 28 00 * 010 23 00 * 010 27 30 * 010 26 00 *	03 00 00 * 09 20 00 * 10 00 00 * 13 54 00 * - 02 45 00 *	
AMES A IOWA AMES A IOWA AMES A IOWA CINCNATI B O AMES IOWA	42 01 59 N 42 01 59 N 42 01 59 N 42 01 59 N 39 09 06 N 42 01 49 N	266 22 00 266 22 00 266 22 00 275 32 15 266 20 59	305 305 305	11 02 30.00 11 03 16.00 11 03 54.00 11 04 06.00 11 04 20.00	328 00 00 329 00 00 329 00 00 313 00 00 001 53 25 *	22 42 00 30 00 00 38 30 00 20 00 00 65 57 33 *	
AMES A IOWA AMES IOWA ALBUO A NM WICHITA KAN DAYTON B O	42 01 59 N 42 01 49 N 35 05 03 N 37 41 44 N 39 50 14 N	266 22 00 266 20 59 253 21 24 262 45 19 275 44 03	305 1520 413 249	11 04 39.00 11 04 48.00 11 04 58.00 11 05 01.50 11 05 02.7)	323 00 00 003 11 52 * 012 43 00 * 006 25 42 * 305 31 00	51 37 00 63 52 34 * 61 30 00 * 87 30 00 * 28 41 00	
AMES IOWA ALBUO A NM AMES A IOWA ALMGROO A NM DAYTON B O	42 01 49 N 35 05 03 N 42 01 59 N 32 52 23 N 39 50 14 N	266 20 59 253 21 24 266 22 00 254 02 57 275 44 03	1520 305 1335 249	11 05 16.00 11 05 16.00 11 05 17.00 11 05 25.00 11 05 28.40	004 27 59 # 012 22 00 # 321 00 00 012 48 36 # 002 05 00 #	59 55 23 <b>*</b> 59 24 00 <b>*</b> 63 18 00 60 54 00 <b>*</b> 43 30 00 <b>*</b>	
AMES IONA CHI FAXN ILL AMES IOWA ALMGRDO A NM WICHITA KAN	42 01 49 N 41 59 00 N 42 01 49 N 32 52 23 N 37 41 44 N	266 20 59 272 21 00 266 20 59 254 02 57 262 45 19	· 218 1335 413	11 06 03.00 11 06 20.00 11 06 21.00 11 06 39.00 11 06 47.50	006 C4 56 # 270 00 00 006 31 03 # 011 46 36 # 008 28 00 #	46 40 25 * 55 30 00 46 05 55 * 47 24 00 * 65 18 00 *	
CINCNATI R O AMES IOWA N CANTON A O AMES A IOWA AMES IOWA	39 09 06 N 42 01 49 N 40 55 54 N 42 01 59 N 42 01 49 N	275 32 15 266 20 59 276 32 40 266 22 00 266 20 59	366 305	11 06 57.00 11 07 16.00 11 07 17.00 11 07 17.00 11 07 27.00	262 00 00 007 22 45 * 003 57 00 * 151 00 00 007 30 08 *	48 00 00 20 29 33 * 19 20 00 * 67 00 00 17 43 15 *	
ALMGRDO A NM AMES A IOWA OAYTON B O AMES IOWA ALMGRDO A NM	32 52 23 N 42 01 59 N 39 50 14 N 42 01 49 N 32 52 23 N	254 02 57 266 22 00 275 44 03 266 20 59 254 02 57	1335 305 249 1335	11 08 03.00 11 08 04.00 11 08 11.00 11 05 12.00 11 05 21.00	011 12 54 * 152 00 00 209 39 00 007 54 52 * 011 07 00 *	30 36 00 * 51 00 00 46 05 00 03 41 40 * 26 48 00 *	
AMES A 10WA CLEVELND A 0 N CANTON A 0 AMES A 10WA CHI FAXN ILL	42 01 59 N 41 29 46 N 40 55 54 N 42 01 59 N 41 59 00 N	266 22 00 278 12 16 278 32 40 266 22 00 272 21 00	305 220 366 305 216	11 08 50.00 11 09 02.00 11 09 09.00 11 09 24.00 11 09 32.00	152 00 00 005 33 00 * 005 32 00 * 152 00 00 180 00 00	40 30 00 06 00 00 * 03 35 00 * 24 42 00 39 00 00	
AMES A IOWA BILOXI MISS DANVILLE ILL CHI FAXN ILL ALMGRDO A NM	42 01 59 N 30 23 27 N 40 08 57 N 41 59 00 N 32 52 23 N	266 2? 00 271 08 28 272 22 26 272 21 00 254 02 57	305 7 189 218 1335	11 09 52.00 11 10 18.00 11 10 25.00 11 11 12.00 11 11 28.00	152 00 00 090 00 00 172 00 00 007 52 00 * 010 46 06 *	21 18 00 75 00 00 33 30 00 24 30 00 **	
DANVILLE ILL PUEBLA P MEX PUEBLA P MEX EDW AF O CAL EDW AF O CAL	40 06 57 N 19 03 00 N 19 03 00 N 34 56 43 N 34 56 43 N	272 22 26 261 49 00 261 49 00 242 04 58 242 04 56	185 2200 2200 785 785	11 11 34.00 11 13 21.60 11 13 56.60 12 38 54.00 12 40 54.00	166 30 00 011 23 36 * 011 20 30 * 336 18 00 340 09 36	24 00 00 16 55 00 4 11 00 00 4 14 07 12 17 54 36	
EOW AF O CAL WLNTCK B CAL EDW AF O CAL CUL CY A CAL EDW AF D CAL	34 56 43 N 37 57 52 N 34 56 43 N 34 09 05 N 34 56 43 N	242 04 58 237 56 14 242 04 58 241 24 06 242 04 56	785 785 785	12 41 54.00 12 42 03.00 12 42 54.00 12 43 52.00 12 43 54.00	343 41 24 021 50 00 # 349 26 24 000 00 00 001 09 00	25 53 24 87 42 00 4 36 24 36 45 00 00 50 08 24	•
WLNTCK B CAL EDW AF D CAL VAN NUYS CAL EDW AF D CAL VAN NUYS CAL	37 57 52 N 34 56 43 N 34 14 22 N 34 56 43 N 34 14 22 N	237 56 14 242 04 58 241 24 45 242 04 58 241 24 45	9 785 <b>276</b> 785 276	12 44 10.00 12 44 54.00 12 45 13.00 12 45 54.00 12 46 14.00	009 09 18 4 030 55 12 045 00 00 087 03 36 090 00 00	47 12 00 6 64 18 00 61 00 00 64 54 00 60 00 00	
EOW AF D CAL TUCSON ARIZ EDW AF D CAL EDW AF D CAL EDW AF D CAL	34 56 43 N 32 13 59 N 34 56 43 N 34 56 43 N 34 56 43 N	242 04 58 249 03 51 242 04 58 242 04 58 242 04 58	227 785 785	12 46 54.00 12 47 27.00 12 47 54.00 12 48 54.00 12 49 54.00	117 19 12 007 16 00 4 128 54 00 134 51 36 138 25 48	51 51 48 18 24 00 39 16 48 29 33 00 22 06 36	•
EDW AF O CAL EDW AF O CAL EDW AF D CAL EDW AF D CAL EDW AF D CAL	34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	242 04 58 242 04 58 242 04 58 242 04 58 242 04 58	785 785 785	12 50 54.00 12 51 54.30 12 52 54.00 12 53 54.00 12 54 18.00	140 45 36 142 19 12 143 37 12 144 36 36 145 09 00	16 12 36 11 23 24 07 13 48 03 39 36 02 22 48	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			19 OCT 1958	(CONT)			
YOKKAICHI J KASHIWABRA J IKOMA J YOKKAICHI J MUSASHINO J	35 00 15 N 34 30 24 N 34 40 34 N 35 00 15 N 35 42 58 N	136 39 00 135 48 15 135 40 23 136 39 00 139 34 35	3 66 634 3 75	19 10 59.00 19 12 13.00 19 12 30.00 19 12 35.00 19 13 10.00	013 48 00 * 011 28 00 * 045 00 00 010 52 00 * 045 00 00	78 00 00 # 61 00 00 # 45 00 00 58 00 00 # 50 42 00	
HGSHMTSYMA J KASHIWABRA J YOKKAICHI J TAIPEI TAIWN	36 02 22 N 34 30 24 N 35 00 15 N 25 02 42 N	139 23 54 135 48 15 136 39 00 121 30 02	31 66 3 22	19 14 30.00 19 14 51.00 19 15 55.00 20 54 50.00	010 07 00 * 010 20 00 * 010 10 00 * 009 53 30 *	22 00 00 # 20 00 00 # 06 00 00 # 24 30 00 #	Υ,,
			20 OCT 1956				
LANSG B MICH ATHENS GR ATHENS GR ATHENS GR ATHENS GR	42 43 00 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	275 13 00 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110	00 37 39.70 03 18 10.40 03 20 06.40 03 20 44.90 03 21 31.90	000 00 00 330 06 00 162 12 00 157 36 00 155 36 00	46 00 00 62 24 00 70 36 00 57 36 00 44 36 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR ATHENS GR	37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	023 43 01 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110 110	03 22 37.45 03 23 42.70 03 24 57.40 03 25 44.90 03 26 12.40	155 00 00 154 42 00 155 00 00 157 12 00 154 48 00	32 00 00 22 36 00 15 24 00 12 54 00 09 24 00	
ATHENS GR BUSSUM NETH BUSSUM NETH HILVRSM NETH HILVRSM NETH	37 58 19 N 52 16 52 N 52 16 52 N 52 16 52 N 52 12 23 N 52 12 23 N	023 43 01 005 09 18 005 09 18 005 10 05 005 10 05	110	03 26 12 40 04 53 03 33 04 55 01 04 04 55 03 00 04 55 12 22	154 48 00 003 26 24 * 005 02 48 * 005 11 30 * 005 16 12 *	09 24 00 10 42 00 * - 06 60 00 * - 07 24 00 * - 08 18 00 *	
BUSSUM NETH HILVRSM NETH HILVRSM NETH CHI FAXN ILL OUNLAP ONTAR	52 15 52 N 52 12 23 N 52 12 23 N 41 59 00 N 43 51 46 N	005 09 18 005 10 05 005 10 05 272 21 00 280 34 40	218 244	C4 55 15.84 C4 55 21.22 C4 55 30.32 C9 44 45.00 C9 45 08.00	005 12 54 * 005 21 00 * 005 25 42 * 009 48 00 * 002 24 00 *	- 07 54 00 # - 09 12 00 # - 10 60 00 # 59 18 00 # 66 12 00 #	! !
OAYTON B O DAYTON B O DUNLAP ONTAR OAYTON B O CHI FAXN ILL	39 50 14 N 39 50 14 N 43 51 46 N 39 5C 14 N 41 59 00 N	275 44 03 275 44 03 280 34 40 275 44 03 272 21 00	249 249 244 249 218	09 45 25.40 09 45 31.50 09 45 32.20 09 46 10.40 09 46 21.00	010 30 00 * 039 30 00 001 25 00 * 010 34 00 * 090 00 00	63 20 00 4 52 03 00 65 48 00 4 51 30 00 4 32 00 00	
OUNLAP ONTAR OAYTON 9 O MILLBROOK NY CINCNATI A O N CANTON C D	43 51 46 N 39 50 14 N 41 51 30 N 39 11 29 N 40 52 35 N	280 34 40 275 44 03 286 22 33 275 17 24 278 35 20	244 249 243 270	09 46 27.80 09 46 46.00 09 46 49.50 09 46 56.00 09 47 31.00	007 19 30 * 010 13 00 * 005 20 00 * 080 00 00 00 008 37 00 *	20 54 00 4 23 12 00 6 29 05 00 6 48 00 00 18 15 00 6	•
MILLBROOK NY OAYTON B O PITTSBGH PA C CNAV G FLA C CNAV G FLA	41 51 30 N 39 50 14 N 49 29 00 N 28 16 17 N 28 16 17 N	286 22 33 275 44 03 280 00 00 279 23 37 279 23 37	243 249 381 11 11	09 48 51.00 09 49 17.20 09 50 22.00 09 59 31.00 09 59 32.00	007 14 00 * 009 27 00 * 140 40 00 356 41 34 356 15 33	22 00 00 9 - 02 00 00 9 25 17 00 12 33 09 12 36 10	
AMES A IOWA EOW AF O CAL EOW AF O CAL AMES A IOWA AMES A IOWA	42 01 59 N 34 56 43 N 34 56 43 N 42 01 59 N 42 01 59 N	266 22 0C 242 04 58 242 04 58 266 22 00 266 22 00	305 785 785 305 303	11 19 53.00 11 19 58.00 11 20 58.00 11 20 59.00 11 21 45.00	311 30 00 014 12 00 023 51 36 305 30 00 298 00 00	16 30 00 15 32 24 18 04 48 24 16 00 31 24 00	
EDW AF O CAL AMES IOWA AMES A IOWA ALMGROO A NM ALMGROO A NM	34 56 43 N 42 01 49 N 42 01 59 N 32 52 23 N 32 52 23 N	242 04 58 266 20 59 266 22 00 254 02 57 254 02 57	305 1335	11 21 58.00 11 22 31.00 11 22 31.00 11 22 32.00 11 22 58.00	036 34 12 002 28 22 * 288 30 00 015 16 48 * 012 35 36 *	38 48 00 83 06 00	•
EOW AF O CAL OENVR A COLO AMES A IOWA ALBUO A NM ALBUO A NM	34 56 43 N 39 44 52 N 42 01 59 N 35 05 03 N 35 05 C3 N	255 03 24 266 22 00 253 21 24	1625 305 1520	11 22 58.00 11 23 00.00 11 23 17.00 11 23 26.00 11 23 45.00	269 30 00 010 22 00 4		
EDW AF O CAL ALMGROO A NM TERRHAUT IND AMES A IOWA ALMGRDO A NM	32 52 23 N 39 31 38 N 42 01 59 N	254 02 57 272 36 10 266 22 00	7 1335 0 155 0 305	11 23 58.00 11 24 12.00 11 24 12.00 11 24 14.00 11 24 49.00	010 29 00 0 270 00 00 242 00 00	30 00 00 51 48 00	
EOW AF O CAL ORGN P SS NM ORGN P SS NM ALMGROO A NM AMES A 10WA	32 25 24 N 32 25 24 N	253 26 53 253 26 53 254 02 5	1 1651 1 1651 7 1335	11 24 58.00 11 25 07.51 11 25 35.53 11 25 36.00 11 25 47.00	010 16 18 010 09 42 010 03 48	19 04 48 47 07 00 38 40 00 37 18 00 42 00 00	*

STATION	LATITUOE	LONGITUDE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KA
			20 OCT 1958	(CONT)			
ORGN P SS NM EDW AF D CAL ALMGROO A NM KANCITY MO CINCNATI B O	32 25 24 N 34 56 43 N 32 52 23 N 39 02 02 N 39 09 06 N	253 26 51 242 04 58 254 02 57 265 25 08 275 32 15	1651 785 1335 259	11 25 47.53 11 25 58.00 11 26 04.00 11 26 05.00 11 26 19.00	010 07 42 085 49 48 010 00 00 * 180 00 00 243 00 00	35 18 00 16 16 48 29 12 00 * 34 20 00 30 00 00	
AMES A IOWA CHI FAXN ILL EDW AF D CAL MANHATTN KAN AMES A IOWA	42 01 59 N 41 59 00 N 34 56 43 N 39 09 45 N 42 01 59 N	266 22 00 272 21 00 247 04 58 263 31 00 266 22 00	305 218 785 311 305	11 26 24.00 11 26 35.00 11 26 58.00 11 27 32.50 11 27 38.00	191 30 00 005 37 00 # 093 45 36 007 33 00 # 180 30 00	36 30 00 04 30 00 * 13 14 24 = 13 30 00 * 26 30 00	
EDW AF D CAL EDW AF O CAL EDW AF D CAL VANCOUVER BC VANCOUVER BC	34 56 43 N 34 56 43 N 34 56 43 N 49 15 46 N 49 15 46 N	242 04 58 242 04 58 242 04 58 236 44 57 236 44 57	785 765 785 105 105	11 27 58.00 11 28 58.00 11 29 58.00 12 57 55.00 12 58 13.00	100 25 48 105 40 48 109 58 48 002 46 00 *	09 58 12 06 48 36 03 56 24 31 00 00 * 29 00 00 *	
SUNYVALE CAL SACMTO E CAL WENTCK B CAL SACMTO E CAL SUNYVALE CAL	37 21 00 N 38 32 55 N 37 57 52 N 36 32 55 N 37 21 00 N	237 56 24 238 14 51 237 56 14 238 14 51 237 56 24	61 15 9 15 61	12 58 43 80 13 00 37 60 13 01 47 00 13 02 19 50 13 02 45 00	000 02 00 * 003 52 04 * 005 48 30 * 006 18 54 * 006 45 24 *	59 45 00 <b>*</b> 52 03 00 <b>*</b> 37 18 00 <b>*</b> 27 22 00 <b>*</b> 21 42 00 <b>*</b>	•
VAN NUYS CAL EDW AF D CAL EDW AF O CAL EDW AF C CAL EDW AF D CAL	34 14 22 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	241 24 45 247 04 58 242 04 58 242 04 58 242 04 58	276 785 785 785 785 785	13 03 11.00 14 00 52.00 14 01 52.00 14 02 52.00 14 03 52.00	290 00 00 314 03 00 302 09 36 269 35 24 211 49 12	70 30 00 38 00 00 52 08 24 66 13 48 64 54 00	
EDW AF D CAL EDW AF D CAL EDW AF D CAL EDW AF D CAL EDW AF D CAL	34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	242 C4 58 242 C4 58 242 C4 56 242 C4 56 242 C4 58	785 785 785 785 785	14 04 52.00 14 05 52.00 14 76 52.00 14 07 52.00 14 08 52.00	184 25 48 174 04 12 169 01 48 166 06 00 164 12 00	51 10 12 38 31 48 28 52 12 21 31 12 15 40 12	
EDW AF D CAL EDW AF D CAL EOW AF D CAL DAYTON B O	34 56 43 N 34 56 43 N 34 56 43 N 39 50 14 N	242 04 58 242 04 58 242 04 58 275 44 03	785 785 785 249	14 09 52.00 14 10 52.00 14 11 52.00 23 58 45.60	162 51 00 161 53 24 161 10 12 023 05 00 **	1D 45 36 06 56 24 03 25 48 - 32 00 00 4	•
			21 OCT 19				
EDW AF D CAL EOW AF D CAL EOW AF D CAL EOW AF D CAL	34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	242 04 58 242 04 58 242 04 58 242 04 58 242 04 58 242 04 58	785 785 785 785 785 78 <b>5</b>	03 37 42.00 03 38 42.00 03 39 42.00 03 40 42.00 03 41 42.00	023 23 06 042 06 00 063 27 54 082 30 00 096 46 48	31 09 36 35 45 00 36 28 12 33 15 00 28 01 48	
EDW AF D CAL EDW AF D CAL EDW AF D CAL EDW AF D CAL EDW AF O CAL	34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	242 04 58 242 04 58 242 04 58 242 04 58 242 04 58	785 785 785 785 785	03 42 42.00 03 43 42.00 03 44 42.00 03 45 42.00 03 46 42.00	106 43 30 113 51 36 119 02 42 122 57 00 126 06 00	22 30 00 17 51 00 12 54 00 08 53 24 05 22 30	
EDW AF O CAL DAYTON B O OAYTON B O DAYTON B O OUNLAP ONTAR	34 56 43 N 39 50 14 N 39 50 14 N 39 50 14 N 43 51 46 N	242 04 58 275 44 03 275 44 03 275 44 03 280 34 40	785 249 249 249 244	03 47 42.00 06 25 46.00 08 26 42.83 08 27 39.60 09 59 39.60	128 31 12 010 23 00 092 47 00 098 14 00 001 37 00	08 35 00 07 27 00	
OAYTON 8 O PITTSEGH PA OAYTON 8 O DAYTON 8 O PITTSEGH PA	39 50 14 N 40 29 00 N 39 50 14 N 39 50 14 N 40 29 00 N	275 44 03 280 00 00 275 44 03 275 44 03 280 00 00	249 381 249 249 381	09 59 53.00 09 59 53.00 10 00 07.80 10 00 28.00 10 01 56.00	330 44 00 315 20 00 001 22 00 002 23 00 279 50 00		
CHI FAXN ILL OUNLAP ONTAR DAYTON B O CINCNATI P O DAYTON B O	41 59 00 N 43 51 46 N 39 50 14 N 39 09 06 N 39 50 14 N	275 44 03 275 32 15	218 244 249 249	10 02 00.00 10 03 34.20 10 03 36.00 10 03 37.00 10 04 13.00	006 04 30 007 03 00 142 00 00	* - 04 00 00	*
PITTSBGH PA CINCNATI B O MILLBROOK NY OUNLAP ONTAR CINCNATI B O		275 32 15 286 22 33 280 34 40	243 244	10 04 22.00 10 04 28.00 10 05 11.00 10 05 39.00 10 05 46.00	145 00 00 605 47 00 006 40 12		
PITTSBGH ÞA MILLBROOK NY DENVR A COLO ALMGDO-GS⊕NM SÁCMTO E CAL	39 44 52 N 32 52 22 N	286 22 33 255 03 24 254 03 05	243 1525 1339	10 05 55.00 10 08 45.00 11 38 46.00 11 38 56.00 11 38 56.60	007 13 00 293 00 00 002 10 54	60 30 00 74 06 00	•

STATION	LATITUOE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVA CON OR C DECLINATION*	SLANT RANGE IN KM
		ž	21 OCT 1958	(CONT)			
ALMGOO-GS.NM EL PASO TEX ORGN P SS NM SACMTO E CAL ALBUO-GS NM	32 52 22 N 31 49 41 N 32 25 24 N 38 32 55 N 35 06 22 N	254 03 05 253 36 36 253 26 51 238 14 51 253 23 14	1339 1651 15 1565	11 39 13.00 11 39 20.50 11 39 32.32 11 39 38.50 11 40 01.00	003 19 42 * 348 30 00 006 28 18 010 03 05 * 006 09 00 *	73 18 00 # 40 00 00 74 12 00 21 50 00 # 54 42 00 #	
ALBUO-GS NM ALMGOO-GS,NM ORGN P SS NM ALMGDO-GS,NM ALMGOO-35,NM	35 06 22 N 32 52 22 N 32 25 24 N 32 52 22 N 32 52 22 N	253 23 14 254 03 05 253 26 51 254 03 05 254 03 05	1565 1339 1651 1339 1339	11 40 19.00 11 40 37.00 11 41 32.24 11.42 27.00 11 42 46.00	006 32 00 # 006 36 48 # 007 41 24 008 00 00 # 008 07 36 #	48 06 00 <b>*</b> 54 42 00 <b>*</b> 37 12 00 14 36 00 <b>*</b> 08 42 00 <b>*</b>	
ORGN P SS NM VANCOUVER BC VANCOUVER BC SACMTO E CAL EDW AF O CAL	32 25 24 N 49 15 46 N 49 15 46 N 38 32 55 N 34 56 43 N	253 26 51 236 44 57 236 44 57 238 14 51 242 04 56	1651 105 105 15 785	11 42 54.46 13 13 29.00 15 13 48.00 13 15 42.50 13 15 47.00	008 18 12 002 23 42 # 002 38 30 # 002 14 17 # 299 50 24	08 28 00 18 12 00 * 16 18 00 * 33 38 00 * 21 19 12	
EDW AF O CAL SACMTO E CAL EDW AF D CAL EOW AF O CAL VAN NUYS CAL	34 56 43 N 38 32 55 N 34 56 43 N 34 56 43 N 34 14 22 N	242 04 58 238 14 51 242 04 58 242 04 58 241 24 45	785 15 785 765 276	13 16 47.00 13 17 02.50 13 17 47.00 13 18 04.00 13 18 19.00	289 47 06 003 36 10 # 275 02 06 269 58 30 270 00 00	27 45 00 20 46 00 * 33 43 48 35 07 12 39 45 00	
PORTLAND ORE SACMTO E CAL WLNTCK B CAL EDW AF O CAL EDW AF D CAL	45 29 19 N 38 32 55 N 37 57 52 N 34 56 43 N 34 56 43 N	237 22 27 238 14 51 237 56 14 242 04 58 242 04 58	46 15 9 785 785	13 18 26.50 13 18 26.90 13 18 32.40 13 18 47.60 13 19 07.00	005 38 00 # 004 51 37 # 004 56 00 # 255 40 12 248 40 12	- 16 18 00 # 92 22 00 # 93 30 00 # 37 25 48 37 54 00	
EOW AF O CAL EDW AF O CAL PORTLAND ORE EDW AF O CAL FDW AF D CAL	34 56 43 N 34 56 43 N 45 29 19 N 34 56 43 N 34 56 43 N	242 04 58 242 04 58 237 22 27 242 04 58 242 04 58	785 785 46 785 785	13 19 47.00 13 20 47.03 13 21 12.00 13 21 47.00 13 22 47.00	234 33 00 217 06 00 006 49 00 * 204 18 00 195 16 30	36 58 48 33 01 12 32 30 00 * 27 28 30 21 42 36	
EDW AF O CAL EDW AF D CAL EDW AF O CAL EDW AF O CAL	34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	242 04 58 242 04 58 242 04 58 242 04 58 242 04 58	765 785 785 785 785	13 23 47.00 13 24 47.00 13 25 47.00 13 26 47.00 13 27 47.00	189 02 42 184 27 00 180 56 42 178 12 00 176 08 24	16 42 00 12 12 00 08 11 24 04 39 00 01 30 54	
			22 OCT 195	58			
S FERNADO SP S FERNADO SP S FERNADO SP CINCNATI R O AMES A IOWA	36 27 42 N 36 27 42 N 36 27 42 N 39 09 06 N 42 01 59 N	353 47 42 353 47 42 353 47 42 275 32 15 266 22 00	30 30 30	03 47 38.57 03 48 29.49 03 49 47.48 08 38 50.00 10 14 39.00	010 32 36 * 010 02 24 * 009 56 42 * 081 15 00 331 00 00	32 44 00 1	·
AMES IOWA OAYTON B O DAYTON B O AMES A IOWA OAYTON B O	42 01 43 N 39 50 14 N 39 50 14 N 42 01 59 N 39 50 14 N	266 20 59 275 44 03 275 44 03 266 22 00 275 44 03	249 249 - 305 249	10 14 49.00 10 15 06.50 10 15 14.60 10 15 45.00 10 16 15.20	006 32 28 4 288 07 00 003 02 00 4 146 00 00 004 15 00 4	44 42 00 35 00 00 4 67 42 00	
OAYTON R O AMES A 10WA OAYTON R O AMES A 10WA OAYTON R O	39 50 14 N 42 01 59 N 39 50 14 N 42 01 59 N 39 50 14 N	275 44 03 266 22 00 275 44 03 266 22 00 275 44 03	249 305 249 305 249	10 16 29.00 10 16 30.50 10 16 38.80 10 16 59.00 10 17 24.50	004 27 00 4 148 00 00 004 36 00 4 148 00 00 005 20 00	52 30 00 16 48 00 45 00 00	•
AMES A IOWA AMES A IOWA OAYTON B O AMES A IOWA AWES A IOWA	42 01 59 N 42 01 59 N 39 50 14 N 42 01 59 N 42 01 59 M	266 22 00	305 305 249 305 305	10 17 26.00 10 17 55.00 10 17 57.00 10 18 23.00 10 18 42.00	148 00 00 148 00 00 202 03 00 148 00 00 148 00 00	38 00 00 33 00 00 45 39 00 28 12 00 26 00 00	•
AMES A IOWA AMES A IOWA WPALMB B FLA ALMGDO-GS.NM WHTIER A CAL	42 01 59 N 42 01 59 N 27 00 00 N 32 52 22 N 33 58 40 N	266 22 00 279 51 00 254 02 05	305 305 1339 149	10 19 10.00 10 19 47.00 10 20 55.88 11 05 25.00 11 51 28.00	012 49 00	60 54 00	
SACMTO E CAL WHTIER A CAL ALMGOO-GS:NM ALMGOO-GS:NM OENVR A COLO	38 32 55 N 33 58 40 N 32 52 22 N 32 52 22 N 39 44 52 N	241 58 25 254 03 05 254 03 05	15 149 1339 1339 1625	11 51 40.60 11 51 56.00 11 52 18.00 11 52 35.00 11 52 52.00	007 20 00 001 08 24 001 30 00	* 82 24 00 * 50 43 00	*
SACMTO E CAL EOW AF D CAL ALBU <b>G-</b> GS NM	38 32 55 N 34 56 43 N 35 06 22 N	242 04 58	15 785 1565	11 53 04.60 11 53 34.00 11 54 09.00	059 18 36	62 44 24	

STATION	LATITUDE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION#	SLANT RANGE IN KM
		:	22 OCT 1958	(CONT)			
EOW AF D CAL ALMGDO-GS,NM AL9UG-GS,NM VAN NUYS CAL EDW AF D CAL	34 56 43 N 32 52 22 N 35 06 22 N 34 14 22 N 34 56 43 N	242 04 58 254 03 05 253 23 14 241 24 45 242 04 58	785 1339 1565 276 785	11 54 15.00 11 54 17.00 11 54 28.0J 11 54 29.00 11 54 34.00	090 09 00 003 39 48 # 006 23 00 # 290 00 00 100 24 48	58 46 12 36 42 00 * 24 12 00 * 55 00 00 55 14 24	
ALMGDO-GS,NM WHTIER A CAL EOW AF D CAL ALMGOO-GS,NM ALMGDO-GS,NM	32 52 22 N 33 58 40 N 34 56 43 N 32 52 22 N 32 52 22 N	254 03 05 . 241 58 25 242 04 58 254 03 05 254 03 05	1339 149 785 1339 1339	11 54 35.00 11 55 25.00 11 55 34.00 11 55 41.00 11 55 59.00	004 01 24 # 008 51 30 # 119 30 00 005 09 30 # 005 25 54 #	32 48 00 # 11 42 00 # 42 52 48 14 36 00 # 09 06 00 #	
WHTIER A CAL EDW AF O CAL ORGN PASS*NM EDW AF D CAL ORGN PASS*NM	33 58 40 N 34 56 43 N 32 25 24 N 34 56 43 N 32 25 24 N	241 58 25 242 04 58 253 26 51 242 04 58 253 26 51	149 785 1651 785 1651	11 56 21.00 11 56 34.00 11 57 33.33 11 57 34.00 11 57 51.31	009 06 00 # 128 38 24 006 35 24 # 133 41 24 006 44 48 #	- 12 06 00 * 32 21 00 - 12 59 00 * 24 12 36 - 16 39 00 *	
ORGN PASSINM EDW AF D CAL EOW AF D CAL EDW AF O CAL EDW AF D CAL	32 25 24 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	253 26 51 242 04 58 242 04 58 242 04 58 242 04 58	1651 785 785 785 785	11 58 13.32 11 58 34.00 11 59 34.00 12 00 34.00 12 01 34.00	006 55 24 # 136 58 48 139 18 00 140 56 24 142 16 48	- 20 39 00 * 17 55 12 12 43 12 08 27 00 04 33 00	
EDW AF O CAL JORL BAK ENG JORL BAK ENG JORL BAK ENG	34 56 43 N 53 14 11 N 53 14 11 N 53 14 11 N	242 04 58 357 41 38 357 41 38 357 41 38	785	12 01 51.00 21 14 56.00 21 14 58.00 22 55 57.00	142 33 36 327 18 90 327 52 90 350 02 90	03 34 48 33 30 00 32 18 00 18 09 00	800 1400
•			23 OCT 195		1		
EGLN AFB FLA	30 33 00 N 30 33 00 N 30 33 00 N 30 33 00 N 30 33 00 N	273 22 41 273 22 41 273 22 41 273 22 41 273 22 41		00 18 27.28 00 18 35.22 00 18 36.65 00 18 45.23 00 19 04.29	207 40 12 205 49 48 204 54 36 205 45 36 303 57 36	20 51 36 24 16 48 24 54 36 30 46 12 41 21 00	
EGUN AFB FLA EGUN AFB FLA EGUN AFB FLA EGUN AFB FLA EGUN AFB FLA	30 33 00 N 30 33 00 N 30 33 00 N 30 33 00 N 30 33 00 N	273 22 41 273 22 41 273 22 41 273 22 41 273 22 41		00 19 04.48 00 19 05.11 00 19 22.63 00 19 22.69 00 19 22.71	209 01 48 207 54 00 204 42 00 211 36 36 201 29 24	40 06 36 41 16 12 60 30 00 58 45 00 61 00 36	
BILOXI MISS EGLN AFB FLA JDRL BNK ENG SHIPAZ IRAN SHIPAZ IRAN	30 23 27 N 30 30 00 N 53 14 11 N 29 38 40 N 29 38 40 N	271 CS 26 273 22 41 357 41 36 C52 31 33 C52 31 33	7 1600 <b>16</b> 00	20 19 42.0 J 50 20 40.12 00 36 24.00 00 49 51.79 00 50 21.65	090 00 00 020 34 52 * 014 06 00 007 08 18 * 007 28 06 *	50 00 00 24 55 34 <b>*</b> 23 30 00 37 03 00 <b>*</b> 25 39 00 <b>*</b>	1400
SHIRAZ IRAN TUCSON ARIZ S FERNNOO SP S FERNNOO SP S FERNNOO SP	29 38 40 N 32 13 59 N 36 27 42 N 36 27 42 N 36 27 42 N	052 31 33 249 03 51 353 47 42 353 47 42 353 47 42	1600 227 30 30 30	00 50 38.66 01 56 29.00 05 37 32.37 05 40 02.98 05 43 32.28	007 37 06 * 020 34 00 * 001 54 12 * 003 34 06 * 005 23 24 *	19 24 00 * - 05 00 00 * 21 21 00 * 00 37 00 * - 31 54 00 *	
TERRHAUT INO DANVILLE TEL ALMGROD A NM ALMGDO-GS.NM ALBUQ A NM	39 31 38 N 40 08 57 N 32 52 23 N 32 52 22 N 35 05 02 N	272 36 10 272 22 26 254 02 57 254 03 05 253 21 24	155 189 1335 1339 1520	10 27 18.50 10 28 05.00 10 28 14.00 10 28 32.00 10 28 33.00	270 00 00 246 30 00 009 55 54 * 009 51 00 *	33 36 00 *	
EVNSVLLE.IND OANVILLE ILL ALMGO-COBMLA COLLE IND EVNSVLLE IND ALBUR A CULL	37 58 14 N 40 08 57 N 32 52 22 N 37 58 14 N 35 05 03 N	272 28 06 272 22 26 254 03 05 272 28 09 253 71 24	129 189 1339 129 1520	10 28 44.60 10 28 49.60 10 28 51.00 10 29 00.00 10 29 01.00	003 58 00 ** 229 30 00 009 49 00 ** 004 13 00 ** 009 32 00 **	39 30 00 28 24 00 4 08 42 00 4	
TERRHAUT IND ALMGOO-GS,NM ALGUO A NM ALGUO A NM OANVILLE ILL	39 31 38 N 32 52 22 N 35 05 03 N 35 05 03 N 40 08 57 N	272 36 10 254 03 05 253 21 24 253 21 24 272 22 26	155 1339 1520 1520	10 29 06.50 10 29 09.03 10 29 20.00 10 29 25.00 10 29 40.00	225 00 00 009 46 00 4 009 29 00 4 009 30 00 4 213 00 00	12 30 00 4	•
ALMGOO-GS.NM ALMGDO-GS.NM EVNSVLLE IND EGLN AFB FLA DANVILLE ILL	32 52 22 N 37 58 14 N	273 22 41	1339 1339 129 189	10 29 55.00 10 30 14.00 10 30 16.00 10 30 25.48 10 30 32.00	009 40 36 9 009 39 48 005 11 00 9 005 04 10 200 00 00	9 12 00 09 48 00	•
EGLN AFB FLA PUEBLA P MEX PUEBLA P MEX DANVILLE ILL DENVR A COLO	19 03 00 N 19 03 00 N 40 08 57 N	261 49 00 261 49 00 272 22 26	2200 2200 189	10 31 21.36 10 33 15.50 10 33 34.90 10 33 35.00 11 04 35.00	010 06 30 179 30 D0	* 17 00 00	*

		LONGITUDE	HEIGHT	TIME GMT	AZIMUTH	ELEVATION	CI ANT
STATION	LATITUOE	FAST	IN METERS	IN HR MIN SEC	OR RGT ASCEN *	OR OECLINATION*	SLANT LANGE IN KM
			23 OCT 1958	(CONT)			
ALMGDO-GS,NM ALBUQ A NM ALMGOO-GS.NM ALBUQ A NM ALBUQ A NM	32 52 22 N 35 05 03 N 32 52 22 N 35 05 03 N 35 05 03 N	254 03 05 253 21 24 254 03 05 253 21 24 253 21 24	1339 1520 1339 1520 1520	12 05 47.00 12 05 47.00 12 06 05.00 12 06 05.00 12 06 19.00	002 35 42 # 002 59 00 # 002 49 54 # 003 14 00 # 003 23 00 #	22 48 00 ** 15 30 00 * 19 30 00 * 11 42 00 * 09 12 00 *	•
ALMGOO-GS.NM ALMGOO-GS.NM ALMGOO-GS.NM ALMGDO-GS.NM JORL BNK ENG	32 52 22 N 32 52 22 N 32 52 22 N 32 52 22 N 32 52 22 N 53 14 11 N	254 03 05 254 03 05 254 03 05 254 03 05 357 41 38	1339 1339 1339 1339	12 06 43.00 12 07 91.00 12 07 57.00 12 08 15.00 21 26 19.00	003 18 30 * 003 30 30 * 004 10 00 * 004 22 00 * 333 22 00	12 30 00 * 09 00 00 * 09 24 00 * 06 30 00 * 25 30 00	1000
JORL BNK ENG	53 14 11 N	357 41 38		23 06 52.00	356 00 00	18 15 00	1350
Fatures			24 OCT 1958				1330
EDINBURG TEX FRYAN TEX EGLN AFB FLA EGLN AFB FLA EGLN AFB FLA	26 18 20 N 30 38 14 N 30 23 05 N 30 23 32 N 30 23 50 N	261 49 39 263 39 58 273 33 07 273 25 50 273 21 00	28 92	00 30 04.00 00 30 21.00 00 30 22.48 00 30 24.00 00 30 24.00	043 00 00 000 10 00 # 295 18 00 297 33 00 296 09 36	16 00 00 27 42 00 * 22 48 00 23 25 48 23 40 12	
BRYAN TEX BRYAN TEX EGLN AFB FLA EGLN AFB FLA EGLN AFB FLA	30 38 14 N 30 38 14 N 30 23 32 N 30 23 05 N 30 23 50 N	263 39 58 263 39 58 273 25 50 273 33 07 273 21 00	92 92	00 30 33.30 00 30 43.80 00 30 51.00 00 31 08.24 00 31 08.24	001 07 00 * 001 56 30 * 317 07 12 326 30 00 328 01 48	35 18 00 * 43 12 00 * 23 06 00 21 06 00 21 45 00	
AMES A 10WA EGLN AFB FLA EGLN AFB FLA EGLN AFB FLA MIL RAD MASS	42 01 59 N 30 23 05 N 30 23 32 N 30 23 50 N 42 37 03 N	266 22 00 273 33 07 273 25 50 273 21 00 288 30 28	305 155	00 31 09.00 00 31 16.48 00 31 16.48 00 31 18.00 00 32 33.80	157 00 00 332 01 12 333 45 36 333 38 24 263 00 60	15 30 00 20 10 48 20 31 48 20 34 12 08 23 24	1380
MIL RAD MASS MIL RAD MASS MIL RAD MASS MIL RAD MASS MIL RAD MASS	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N	288 30 28 288 30 28 288 30 28 288 30 28 288 30 29	155 155 155 155 155	00 33 29.88 00 34 20.00 00 34 33.70 00 35 27.60 00 36 29.32	273 07 12 296 42 00 304 10 48 329 42 36 352 10 00	13 56 12 17 18 00 19 12 00 19 33 00 16 51 36	1119 993 973 975
MIL RAD MASS EDW AF D CAL EDW AF D CAL EDW AF D CAL EDW AF D CAL	42 37 03 N 34 55 43 N 34 56 43 N 34 56 43 N 34 56 43 N	288 30 28 242 04 59 242 04 58 242 04 58 242 04 58	155 785 785 785 785	00 37 29.55 02 76 40.00 02 96 50.00 02 07 00.00 02 07 10.00	006 16 48 167 57 18 161 03 00 150 57 00 137 36 54	11 25 12 31 23 24 36 22 48 41 01 48 45 00 00	1215
EDW AF D CAL EDW AF D CAL EDW AF D CAL TUCSON ARIZ CINCNATI 5 0	34 56 43 N 34 56 43 N 34 56 43 N 32 13 59 N 39 09 06 N	242 04 58 242 04 58 242 04 58 249 03 51 275 32 15	785 785 785 227	02 07 20.00 02 07 20.00 02 07 20.00 02 07 40.00 02 07 50.00 09 02 11.00	121 36 00 104 33 36 089 34 48 319 00 00 132 00 00	47 15 29 47 01 30 44 34 12 29 00 00 34 30 00	
CINCNATI = 0 0AYTON B 0 HUANCAYO PER HUANCAYO PER CINCNATI P 0	39 09 06 N 39 50 14 N 12 01 27 5 12 01 27 5 39 09 06 N	275 32 15 275 44 02 284 40 26 284 40 28 275 32 15	249 3476 3476	09 03 35.00 09 05 24.00 09 12 36.00 09 15 18.00 10 38 53.00	137 45 00 008 32 00 * 010 26 00 * 011 02 00 * 246 00 00	22 30 00 27 15 00 * 38 30 00 * 13 00 00 * 21 00 00	
PUEBLA P MEX PUEBLA P MEX OAYTON B O EVNSVLLE IND EVNSVLLE INO	19 03 00 N 19 03 00 N 39 30 14 N 37 58 14 N 37 58 14 N	261 49 00 261 49 00 275 44 03 272 28 05 272 28 08	2200 - 2200 249 129 129	10 42 38 8 8 C 10 43 29 8 3 C 10 43 34 8 S 11 40 14 8 C O 11 41 38 8 C O	008 28 24 * 008 43 00 * 005 23 00 * 002 45 00 * 005 07 00 *	24 15 00 * 06 36 00 * 38 20 00 * 20 00 00 *	
EVNSVLLE IND EDW AF D CAL SACMTO E CAL SACMTO E CAL EOW AF D CAL	37 58 14 N 34 56 43 N 38 32 55 N 38 32 55 N 34 56 43 N	272 28 08 242 04 58 238 14 51 238 14 51 242 04 58	129 785 15 15 785	11 43 22.00 12 16 31.00 12 16 40.40 12 17 19.30 12 17 31.00	005 20 00 * 162 27 00 006 09 55 * 006 28 15 * 197 05 06	37 00 00 * 36 46 12 - 17 54 00 * - 23 37 00 * 36 10 12	
EDW AF D CAL EDW AF D CAL EDW AF D CAL EDW AF D CAL EDW AF D CAL	34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N 34 56 43 N	242 04 58 242 04 58 242 04 58 242 04 58 242 04 58	785 785 785 785 785 785	12 18 31.00 12 19 31.00 12 20 31.00 12 21 31.00 12 22 31.00	186 57 54 180 36 36 176 21 00 173 25 12 171 10 19	28 01 12 21 11 24 15 32 24 10 48 36 06 43 12	
EDW AF D CAL MGRO NICE FR JDRL BNK ENG WASHGTN A OC ST COLL PA	34 56 43 N 43 43 17 N 53 14 11 N 38 45 30 N 40 44 01 N	242 04 58 007 18 01 357 41 38 282 47 30 282 06 33	785 376 69 393	12 23 24.00 18 14 12.00 21 35 26.00 23 03 04.00 23 03 09.00	169 39 36 030 36 00 328 47 00 107 30 00 120 00 00	03 33 00 24 00 00 21 31 00 24 00 00	1130
GRNSBRO A NC ARLINGTON VA	36 04 38 N 38 50 48 N	280 07 57 282 53 35	265 59	23 03 27.00 23 03 36.00	001 45 00 * 090 00 00	16 00 00 25 30 00 * 21 54 00	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*
			24 OCT 1958	(CONT)		
ST COLL PA BRYN ATHN PA ST COLL PA ST COLL PA	40 44 01 N 40 08 00 N 40 44 01 N 40 44 01 N	282 06 33 284 56 00 282 06 33 282 06 33	393 85 393 393	23 03 44 • 00 23 03 58 • 00 23 04 10 • 06 23 04 42 • 00	102 00 00 090 00 00 090 00 00 001 51 00 *	17 00 00 29 00 00 17 00 00 19 24 00 *
PUEBLA P MEX	10 40 44 11		25 OCT 1958			
EDINBURG TEX EDINBURG TEX EDINBURG TEX BRYAN TEX	19 03 00 N 26 18 20 N 26 18 20 N 26 18 20 N 30 38 14 N	261 49 00 261 49 39 261 49 39 261 49 39 263 39 58	2 2 0 0 2 8 2 8 2 8 9 2	00 35 25.70 00 37 01.00 00 37 02.30 00 37 12.30 00 37 59.80	310 00 00 300 00 00 300 00 00 315 00 00 016 53 30 #	18 00 00 38 20 00 39 50 00 37 00 00 31 18 00 *
WICHITA KAN RRYAN TEX AMES A IOWA WICHITA KAN BTLSVL A OKL	37 41 44 N 30 38 14 N 42 01 59 N 37 41 44 N 36 42 18 N	262 45 19 263 39 58 266 22 00 262 45 19 264 03 36	413 92 305 413 213	00 38 42.30 00 38 47.90 00 38 54.00 00 39 10.90 00 39 17.00	020 21 19 * 016 15 00 * 199 30 00 021 17 00 * 180 00 00	- 20 48 00 # 80 00 00 # 14 12 00 - 04 54 00 # 69 00 00
AMES A IOWA MANHATTN KAN AMES A IOWA LAWTON OKLA BTLSVL A OKL	42 01 59 N 39 09 45 N 42 01 59 N 34 39 44 N 36 42 18 N	266 22 00 263 31 09 266 22 00 261 35 47 264 03 36	305 311 305 358 213	00 39 22.00 00 39 35.00 00 39 50.00 00 40 00.00 00 40 06.00	195 30 00 021 26 00 * 190 30 00 042 18 00 000 07 00 *	20 30 00 - 04 26 00 * 29 06 00 27 00 00 59 15 00 *
EVNSVLLE IND BTLSVL A OKL KANCITY MO EVNSVLLE IND AMES A IOWA	37 58 14 N 36 42 18 N 39 02 C2 N 37 58 14 N 42 01 59 N	272 28 08 264 03 36 265 25 08 272 28 08 266 22 00	129 213 259 129 305	00 40 00.00 00 40 14.00 00 40 14.00 00 40 15.00 00 40 18.00	017 37 30 * 000 50 00 * 021 45 00 * 013 26 00 * 178 30 00	- 02 45 36 * 61 00 00 * 38 20 00 * 65 00 00 * 44 30 00
ETLSVL A OKL MANHATTN KAN AMES IOWA AMES A IOWA AMES IOWA	36 42 18 N 39 09 45 N 42 01 43 N 42 01 59 N 42 01 43 N	264 03 36 263 31 09 266 20 59 266 22 00 266 20 59	213 311 305	CO 40 22.00 GO 40 38.00 GO 40 54.00 GO 40 54.00 GO 41 14.00	001 35 00 * 000 52 30 * 022 27 19 * 118 30 00 023 48 38 *	61 20 00 * 39 48 00 * 24 36 58 * 61 42 00 39 13 41 *
SUNYVALE CAL SACMTO E CAL WLNTCK O CAL SAM JOSE CAL SACMTO E CAL	37 21 00 N 38 32 55 N 37 57 54 N 37 23 01 N 38 32 55 N	237 56 24 238 14 51 238 00 10 238 11 13 238 14 51	61 15 122 15	02 15 46.80 02 16 10.80 92 16 28.00 02 16 32.00 02 16 40.70	022 03 36 * 022 39 04 * 023 57 00 * 001 07 00 * 000 15 41 *	06 24 00 * 10 33 00 * 32 00 00 * 42 00 00 *
SUNYVALE CAL PORTLAND ORE SUNYVALE CAL WALMB A FLA WALMB A FLA	37 21 00 N 45 29 19 N 37 21 00 N 26 39 30 N 26 39 30 N	237 56 24 237 22 27 237 56 24 279 55 20 279 55 20	61 46 61 5	02 17 01.60 02 17 03.00 02 17 18.00 09 13 00.00 09 14 38.00	002 01 36 * 022 15 00 * 002 38 00 * 141 00 00 148 00 00	31 16 00 # 46 00 00 # - 15 30 00 # 47 12 00 # 51 00 00
WPALMS A FLA WPALMS A FLA WPALMS A FLA HUANCAYO PER HUANCAYO PER	26 39 30 N 26 39 30 N 26 39 30 N 12 01 27 S 12 01 27 S	279 55 20 279 55 20 279 55 20 284 40 28 284 40 28	5 5 5 3476 3476	09 15 33.00 09 16 09.00 09 17 24.00 09 22 31.00 09 24 09.00	150 00 00 150 00 00 150 00 00 152 00 00 010 16 00 #	31 00 00 23 00 00 19 00 00 12 00 00 17 00 00 *
AREOUIPA PER AREOUIPA PER PUEBLA P MEX PUEBLA P MEX PUEBLA P MEX	16 27 43 S 16 27 43 S 19 03 00 N 19 03 00 N 19 03 00 N	288 30 31 288 30 31 261 49 00 261 49 00 261 49 00	2452 2452 2200 2200 2200	09 24 31.28 09 25 30.69 10 49 05.00 10 52 59.50 10 54 05.20	010 08 30 * 010 39 18 * 004 58 06 * 007 36 42 * 007 58 18 *	05 38 00 * 07 06 00 * 44 00 00 * 31 35 00 *
MAUI HAWAII MAUI HAWAII MAUI HAWAII THSLONIKI GR THSLONIKI GR	20 42 36 N 20 42 36 N 20 42 36 N 40 38 00 N 40 38 00 N	203 44 23 203 44 23 203 44 23 022 57 00 022 57 00	3048 3048 3048	15 40 24.94 15 40 36.96 15 40 48.98 16 44 21.00 16 44 43.00	003 03 24 # 003 08 00 # 003 12 36 # 019 54 00 # 021 00 00 #	- 40 12 00 * - 04 56 00 * - 07 07 00 * - 09 13 00 * 08 00 00 *
THSLONIKI GR S FERNNDO SP S FERNNOO SP MEUOON FR MEUOON FR	40 38 00 N 36 27 42 N 36 27 42 N 48 48 18 N 48 48 18 N	022 57 00 353 47 42 353 47 42 002 13 52 002 13 52	30 162	16 45 19.00 18 19 23.62 18 19 27.62 18 21 22.80 18 21 41.50	000 10 00 # 021 05 42 # 021 16 24 # 193 26 00 189 49 00	31 00 00 * 57 00 00 * - 05 34 00 * - 02 18 00 * 16 01 00
S FERNNDO SP MEUOON FR MEUOON FR MEUOON FR MEUOON FR	36 27 42 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	353 47 42 002 13 52 002 13 52 002 13 52 002 13 52	30 162 162 162	18 21 42.02 18 21 54.50 18 22 08.50 18 22 21.30 18 22 33.30	003 14 18 # 186 39 00 182 06 00 176 33 00 169 42 00	20 03 00 48 20 00 * 23 23 00 21 37 00 31 58 00 36 25 00
MEUOON FR MEUOON FR BIARRIT2 FR AOLAIO C AUS GRNSBRO A NC	48 48 18 N 48 48 18 N 43 28 00 N 34 44 00 S 36 04 38 N	002 13 52 002 13 52 358 26 48 138 40 00 280 07 57	162 162	18 22 46.30 18 23 11.40 18 24 05.00 19 07 26.00 23 08 59.00	159 38 00 131 58 00 056 00 00 011 05 00 #	41 28 00 48 18 00 30 00 00 C8 30 00 # 37 00 00 #

SLANT RANGE IN KM

		LONGITUDE	HEIGHT IN	TIME GMT	AZIMUTH OR	ELEVATION OR	SLANT RANGE
STATION	LATITUOE	EAST	METERS	HR MIN SEC	RGT ASCEN *	OECLINATION*	IN KM
		2	6 OCT 1958	3			
BRYAN TEX	30 38 14 N	263 39 58	92	00 44 19.40	012 07 30 *	06 18 00 *	
BRYAN TEX BRYAN TEX	30 38 14 N 30 38 14 N	263 39 58 263 39 58	92 92	00 44 28 30 00 44 37 70	012 00 00 * 011 52 00 *	15 06 00 # 24 00 00 #	
BRYAN TEX BRYAN TEX	30 38 14 N 30 38 14 N	263 39 58 263 39 58	92 9 <b>2</b>	00 44 45.90 00 44 56.00	011 40 00 # 011 26 00 #	32 48 00 <b>*</b> 41 30 00 <b>*</b>	
LAWTON OKLA	34 39 44 N	261 35 47	358	00 44 59.00	276 00 00	37 36 00	
OK CY A OKLA LAWTON OKLA	35 33 50 N 34 39 44 N	262 29 20 261 35 47	360 358	00 45 13 00 00 45 41 00	014 18 00 <del>*</del> 378 00 00	75 30 00 * 39 00 00	
OK CY A OKLA MANHATTN KAN	35 33 50 N 39 09 45 N	262 <b>29 20</b> 2 <b>63 31 0</b> 9	360 311	00 45 50.00 00 45 54.00	000 00 00	28 00 00 1 <b>2 4</b> 0 <b>00 *</b>	
MANHATTN KAN	39 09 45 N	263 31 09	311	00 46 31.00	017 38 00 *	52 00 00 *	
LAWTON OKLA Wichita Kan	34 39 44 N 37 41 44 N	261 35 47 262 45 19	358 413	00 46 48.00 00 46 55.70	005 24 00 008 33 28 *	19 48 00 37 00 00 #	
MANHATTN KAN LINCOLN NEB	39 09 45 N 40 50 18 N	263 31 09 263 20 48	311 355	00 47 13.50 00 47 25.00	004 20 00 *	°9 49 00 # 77 30 00 #	
LAWTON OKLA	34 39 44 N	261 35 47	358	00 47 29.00	012 42 00	14 18 00	
LAWTON OKLA BTLSVL A OKL	34 39 44 N 36 42 18 N	261 35 47 264 03 36	358 213	00 47 45.00 00 48 19.00	015 00 00 015 20 00 *	1^ 54 00 60 00 00 *	
WENTER D CAL SAN JOSE CAL	37 57 54 N 37 23 01 N	238 00 10 239 11 13	122	02 21 54.10 02 2 <b>2</b> 05.50	017 34 00 * 012 40 00 *	. 14 00 00 * 87 15 00 *	
WENTCK B CAL	37 57 52 N	237 56 14	9	02 22 28 • 30	017 49 30 *	51 00 00 *	
SACMTO E CAL PORTLAND ORE	38 32 55 N 45 29 19 N	238 14 51 237 22 27	15 46	02 22 49.20 02 25 10.00	018 13 34 * 003 16 00 *	54 24 00 # 39 12 00 #	
OAKLAND CAL Portland ore	37 47 00 N 45 29 19 N	237 48 00 237 22 27	30 46	02 2 <b>7</b> 52.00 9 <b>2 32 23.</b> 50	012 33 00 * 021 26 00 *	75 10 00 * - 05 00 00 *	
KONKO J	34 32 31 N	133 37 40	4	08 45 22 • 10	160 00 00	27 30 00	
KONKO J	34 32 31 N 16 27 43 S	133 37 40 288 30 31	2452	18 46 11•00 09 77 49•48	121 00 00 007 30 18 #		
AREQUIPA PER AREQUIPA PER	16 27 43 S 16 27 43 S	28° 30 31 289 30 31	2452 2452	69 29 41.85 89 31 34.25	008 35 30 * 009 54 06 *		
PUERLA P MEX	19 03 00 A	261 49 33	2200	10 56 17.50	005 23 54 4		
PUEBLA P MEX	19 03 00 N 19 03 00 N	261 49 00 261 49 00	2200 2200	10 56 54.40 10 57 12.80	005 01 18 4 005 13 24 4	- 31 08 00 4	•
PUEBLA P MEX MAUI HAWAII	19 03 00 N 20 42 36 N	261 49 00 203 44 23	7200 3048	10 59 22.90 14 10 27.75	007 50 18 1		
IIAWAH IUAM IIAWAH IUAM	20 42 36 N 20 42 36 N	203 44 23 203 44 23	3048 3048	14 (0 00.73 14 (0 47.71	007 54 70 1 007 56 54 1		
JOKNN OB FIN JOKNN OB FIN	50 48 50 N 60 48 50 N	023 3C 09 023 3C 09	103	16 52 12 20 16 52 22 50	175 00 00 167 30 00	09 42 00 10 42 00	•
JOKNA 03 FIN	60 48 50 N	023 30 09	103	16 52 32 • 30	164 54 00	11 42 00	
BIARRITZ FR BIARRITZ FR	43 28 00 N 43 28 00 N	358 25 48 358 26 49		18 26 10.00 18 27 15.00	234 00 00 302 00 00	24 00 00 67 30 00	
BIARRITZ FR BIAPPITZ FR	43 28 00 N 43 28 00 N	359 26 46 355 26 46		18 27 47.00 18 28 00.00	358 00 00 015 00 00	58 12 00 44 00 00	
BIARRITZ FR	43 28 00 N	358 26 48		18 28 30.00	023 00 00	35 12 00	
BIARRITZ FR ADLAIO C AUS	43 23 00 N 34 44 00 S	358 26 48 138 49 00		18 29 10:00 19 11 13:00			
CAROC CAN	46 47 10 N	288 43 45	91 27 OCT 1	23 16 22.00	018 35 00	* 38 42 00	*
KANCITY MO	39 02 02 N	265 25 08	259	00 50 25 00	270 30 00	16 00 00	
MANHTN A KAN	39 15 58 N 38 32 55 N	263 22 38 238 14 51	408 15	00 50 42.00	015 33 14		
SACMTO E CAL SACMTO E CAL SACMTO E CAL	38 32 55 N 38 32 55 N	238 14 51 238 14 51	15 15	02 26 41.50 02 76 51.30 02 27 28.60	015 20 19	* 33 11 00	*
SUNYVALE CAL	37 21 00 N	237 56 24	61	92 27 30 .00			
SACMTO E CAL BOISE IOA	38 32 55 N 43 36 30 N	238 14 51 243 32 30	15 1006	02 28 38 00 02 29 45 00	009 30 15		
PORTLANO ORE TOKYO JAPAN	45 29 19 N 35 40 11 N	237 22 27	46 58	02 30 59 60 03 50 37 44	016 18 00	* 45 3 <sup>^</sup> 00	
MITAKA J	35 40 20 N		50	08 50 47.50		22 42 00	
TOKYO JAPAN MITAKA J	35 40 11 N 35 40 20 N	139 32 28	58 50	08 51 37.61 08 51 46.10	7 013 37 12		*
MITAKA J MITAKA J	35 40 20 N 35 40 20 N	139 32 30	50 50	08 52 36 •10 08 53 08 •60	350 36 00	16 36 00 13 06 00	
VAPAN CYNOT	35 40 11 N		58	08 53 09.2			*
MIZUKAIDO J AREOUIPA PER	36 00 56 N 16 23 05 S	139 59 18	12 2377	08 53 40 • 0 09 30 16 • 8	0 000 00 00	14 30 00	
AREQUIPA PER AREQUIPA PER			2377 2 <b>37</b> 7	09 33 05 • 9 09 37 25 • 8	6 006 29 00	* 11 58 00	*

STATION	LATITUOE	LONG I TUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			27 OCT 1958	(CONT)			
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	16 55 25.20 16 55 32.00 16 55 39.50 16 55 50.30 16 56 01.20	181 42 00 180 18 00 176 24 00 175 48 00 172 42 00	12 06 00 12 54 00 13 48 00 15 12 00 16 36 00	
JOKNA OB FIN JOKNA OB FIN JOKNA OB FIN SSLVOR C BVI BIARRITZ FR	60 48 50 N 60 48 50 N 60 48 50 N 24 03 59 N 43 28 00 N	023 30 09 023 30 09 023 30 09 285 27 49 358 26 48	103 103 103 15	16 56 15.73 16 56 28.10 16 56 36.70 16 56 53.70 18 26 55.00	166 06 00 163 42 00 160 18 00 153 00 00 260 00 00	18 30 00 20 12 00 21 18 00 23 24 00 13 48 00	
AGEN FRANCE BIARRITZ FR AGEN FRANCE BIARRITZ FR BIARRITZ FR	44 10 36 N 43 28 00 N 44 10 36 N 43 28 00 N 43 28 00 N	000 35 42 358 26 48 000 35 42 358 26 48 358 26 43		18 27 30.00 18 27 40.00 18 29 00.00 18 29 30.00 18 29 45.00	266 24 00 266 12 00 351 30 00 344 00 00 353 30 00	26 00 00 26 36 00 26 30 00 31 00 00 27 48 00	
BIARRITZ FR BIARRITZ FR BIARRITZ FR FARNHAM ENG ORFONESS ENG	43 28 00 N 43 28 00 N 43 28 00 N 51 12 00 N 52 06 00 N	358 26 48 358 26 48 356 26 48 359 12 00 001 36 00		18 30 05.00 18 30 35.00 18 31 00.00 18 31 03.00 18 31 11.50	001 00 00 011 06 00 014 46 00 019 27 00 * 221 30 00	24 00 00 18 37 00 15 48 00 11 30 00 * 35 00 00	
BIARRITZ FR CAMBR U ENG FARNHAM ENG WOKING ENG BATTERSE ENG	43 28 00 N 52 12 51 N 51 12 00 N 51 18 00 N 51 28 00 N	358 26 48 000 05 41 359 12 00 359 27 00 359 51 00	28	18 31 20.00 18 31 21.10 15 31 37.00 18 31 45.00 18 31 45.00	017 00 00 206 48 00 020 40 00 * 021 00 00 * 020 32 42 *	14 12 00 45 24 00 35 00 00 # 40 00 00 # 37 12 00 #	
BONN B GER CHELMSFD ENG ORFDNESS ENG CAMBR U ENG BONN B GER	50 43 45 N 51 43 00 N .52 06 00 N 52 12 51 N 50 43 45 N	007 05 47 000 30 00 001 36 00 000 05 41 007 05 47	62 26 62	18 31 55.00 18 31 57.00 18 31 57.30 18 32 17.10 18 32 53.00	016 39 00 * 022 40 00 * 221 30 00 093 06 00 014 50 00 *	32 18 00 * 42 00 00 * 65 00 00 74 54 00 68 30 00 *	·
			28 OCT 195	8			
ALMGRDO A NM ALMGRDO A NM ALMGRDO A NM MANHTN B KAN MLWKEE B WIS	32 52 23 N 32 52 23 N 32 52 23 N 32 52 23 N 39 13 51 N 42 59 25 N	254 52 57 254 62 57 254 62 57 263 22 54 272 01 15	1335 1335 1335 409	90 52 30.00 00 52 40.10 00 54 05.00 00 55 28.90 30 56 45.00	012 20 30 * 111 45 42 * 267 33 48 * 345 17 48 012 30 00 *	65 48 00 # 68 00 00 # 66 12 00 # 13 43 00 53 40 00 #	
MLWKEE B WIS SACMTO E CAL SACMTO E CAL WLNTCK O CAL PORTLAND ORE	42 59 25 N 38 32 55 N 38 32 55 N 37 57 54 N 45 29 19 N	272 01 15 238 14 51 238 14 51 238 00 19 237 22 27	15 15 46	00 57 03.00 02 79 11.20 02 30 32.50 02 30 39.70 02 30 59.60	011 48 00 * 014 46 30 * 012 53 14 * 012 13 00 * 016 18 00 *	55 40 00 # 34 36 00 # 54 03 00 # 57 12 00 # 46 30 00 #	
PORTLAND OPE ASAHIKAWA J AREOUIPA PER LEPUY FRANCE BIARRITZ FR	45 29 19 N 43 45 27 N 15 23 05 S 45 03 18 N 43 28 00 N	237 22 27 142 21 50 288 27 55 003 53 42 358 26 48	46 113 2377	32 31 34.65 03 57 43.00 09 35 26.57 18 29 10.00 18 29 30.00	014 30 00 * 003 00 00 * 004 58 06 * 330 00 00 285 00 00	74 96 00 * 61 00 00 * 73 12 00 * 29 30 00 35 00 00	
LEPUY FRANCE BIARRITZ FR BIARRITZ FR HORSBROG ENG WOKING ENG	45 03 18 N 43 28 00 N 43 28 00 N 50 53 00 N 51 18 00 N	003 53 42 358 26 48 358 26 48 000 15 00 359 27 00		18 29 55.00 18 30 40.00 18 31 30.00 18 32 11.00 18 33 05.00	010 00 00 320 00 00 350 00 00 252 00 00 018 06 00 #	30 12 00 34 00 00 25 00 00 33 00 00 49 00 00 **	<u>.</u>
BATTERSE ENG HORSBROG ENG FARNHAM ENG ADLAID C AUS JORL BNK ENG	51 28 00 N 50 53 00 N 51 12 00 N 34 44 00 S 53 14 11 N			18 33 08.60 18 33 17.00 18 33 45.00 19 13 45.00 20 12 29.00	017 54 30 4 314 00 00 000 00 00 007 35 00 4 334 05 00	55 00 00 85 30 00	
LANSG A MICH OAYTON B O LANSG A MICH LANSG A MICH N CANTON A O	42 44 00 N 39 50 14 N 42 44 00 N 42 44 00 N 40 55 54 N	275 44 03 275 31 00 275 31 00	261 249 261 261 366	23 17 31.50 23 18 00.00 23 18 31.00 23 18 35.00 23 19 12.00	232 00 00 327 27 00 019 15 00 4 017 43 00 4 010 35 00	46 02 00	*
BRISTOL TENN LANSG A MICH	36 35 03 N 42 44 00 N		52 <b>7</b> <b>2</b> 61	23 19 23.00 23 22 00.00		11 48 00 45 30 00	*
			29 OCT 19	5 8			
MANHATTN KAN MANHATTN KAN SACMTO E CAL SACMTO E CAL	39 09 45 N 38 32 55 N	263 31 09 238 14 51	311 15	00 55 00:00 00 56 09:00 02 31 15:10 02 31 35:20	011 55 00 012 54 08	* 54 26 00 * 47 42 00	*

STATION	LATITUDE	LONG I TUDE EAST	HEIGHT IN METERS	TIME GMT IN PR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION . OR OECLINATION*	SLANT RANGE IN KM
			29 OCT <b>195</b> 8	(CONT)			
SJUAN-GS ARG ASAHIKAWA J ASAHIKAWA J ASAHIKAWA J ASAHIKAWA J	31 30 37 5 43 46 27 N 43 46 27 N 43 46 27 N 43 46 27 N	291 22 46 142 21 50 142 21 50 142 21 50 142 21 50	650 113 113 113 113	08 01 30.00 08 54 47.00 08 55 47.00 08 56 10.00 08 56 21.00	009 55 00 * 014 50 00 * 013 38 00 * 012 45 00 * 012 13 00 *	16 12 00 # 27 00 00 # 48 00 00 # 55 00 00 # 57 00 00 #	=.
ASAH!KAWA J ASAHIKAWA J AREOUIRA PER CAMBR U ENG BIARRITZ FR	43 46 27 N 43 46 27 N 16 27 43 S 52 12 51 N 43 28 00 N	142 21 50 142 21 50 288 30 31 000 05 41 358 26 48	113 113 7452 28	08 56 47.00 08 57 18.00 09 35 12.80 18 05 56.12 18 30 20.00	011 03 00 * 009 32 00 * 003 44 54 * 262 18 00 293 36 00	62 00 00 # 62 00 00 # - 03 13 00 # 31 36 00 11 00 00	
BIARRITZ FR ORFDNESS ENG BIARRITZ FR ORFDNESS ENG CAMBR U ENG	43 28 00 N 52 06 00 N 43 28 00 N 52 06 00 N 52 12 51 N	358 26 48 001 36 00 358 26 48 001 36 00 000 05 41	28	18 31 00.00 18 31 11.60 18 31 30.00 18 31 46.30 18 31 56.10	310 30 00 254 06 00 349 00 00 265 18 00 262 18 00	14 00 00 18 00 00 14 00 00 25 00 00 31 36 00	
BIARRITZ FR BIARRITZ FR ORFONESS ENG GELEEN NETH BIARRITZ FR	43 28 00 N 43 28 00 N 52 06 00 N 50 57 55 N 43 28 00 N	358 26 48 358 26 48 001 36 00 005 49 27 358 26 48		18 32 00.00 18 32 15.00 18 32 22.00 18 32 22.80 18 32 30.00	356 48 00 000 48 00 276 36 00 015 32 30 *	13 06 00 11 42 00 35 00 00 26 48 00 * 10 48 00	
CAMBR U ENG BIARRITZ FR HORSBRDG ENG BIARRITZ FR ORFDNESS ENG	52 12 51 N 43 28 00 N 50 53 00 N 43 28 00 N 52 06 00 N	000 05 41 358 26 48 000 15:00 358 26 48 001 36 00	28	18 32 40.10 18 32 45.00 18 32 49.00 18 33 00.00 18 33 00.00	292 06 00 006 30 00 317 00 00 009 00 00 304 42 00	46 30 00 09 48 00 40 00 00 18 54 00 43 00 00	•
HORSBRDG ENG BIAPRITZ FR ORFDNESS ENG CAMBR U ENG BIARRITZ FR	50 53 00 N 43 28 00 N 52 06 00 N 52 12 51 N 43 28 00 N	000 15 00 358 26 48 001 36 CC 000 05 41 358 26 48	28	18 33 11.00 18 33 15.00 18 33 20.90 18 33 24.50 18 33 30.00	337 00 00 011 48 00 327 12 00 343 48 00 013 54 00	41 00 00 07 42 00 44 00 00 47 30 00 07 00 00	
HORSBRDG ENG ORFDNESS ENG OLST NETH HERSTMCX ENG ORFDNESS ENG	50 53 00 N 52 06 00 N 52 19 51 N 50 52 01 N 52 06 00 N	000 15 00 001 36 00 006 08 28 000 20 16 001 36 00	32	18 33 45.00 18 33 52.50 18 34 12.80 16 34 31.00 18 34 33.30	001 00 00 001 00 00 012 05 00 # 350 00 03 017 48 00	30 00 00 37 00 00 55 12 00 • 33 00 00 27 00 00	.1
ORFDNESS ENG HERSTMCX ENG ADLAID C AUS WOOMER AUS WOOMER AUS	52 06 00 N 50 52 01 N 34 44 00 S 31 06 06 S 31 06 06 S	001 36 00 000 20 16 138 40 00 136 46 54 136 46 54	32 162 162	18 35 05 40 18 35 31 00 19 14 05 00 19 14 30 56 19 14 53 95	039 18 00 014 00 00 007 06 00 * 005 01 36 * 008 22 30 *		•
WOOMER AUS DAYTON B O ST COLL R PA DAYTON B O DUNLAP ONTAR	31 06 06 5 39 50 14 N 40 44 00 N 39 50 14 N 43 51 46 N	136 46 54 275 44 03 282 06 33 275 44 03 280 34 43	162 249 249 244	10 15 29 95 23 16 32 80 23 16 55 00 23 17 26 50 23 17 17 22	009 37 30 * 245 00 00 013 28 00 * 013 37 00 * 015 17 00 *	27 00 00 23 30 00 54 54 00	•
N CANTON A O OAYTON B O OUNLAP ONTAR LANSG A MICH ST COLL PA	40 55 54 N 39 50 14 N 43 51 46 N 42 44 00 N 40 44 01 N	278 32 40 275 44 03 280 34 40 275 31 00 282 06 23	366 249 244 261 393	23 17 34.00 23 18 00.00 23 18 20.80 23 18 25.00 23 18 37.00	012 10 00 4 327 27 00 013 51 42 4 000 00 00 012 02 00 4	43 03 00 52 00 00 27 00 00	*
ST COLL R RA BRISTOL TENN ST COLL P RA	40 44 00 N 36 35 03 N 40 44 00 N	282 06 33 277 50 31 28 <b>2 06</b> 33	393 527 39 <b>3</b>	23 19 05.00 23 19 08.00 23 20 12.00	011 00 00 • 000 00 00 000 00 00	60 00 00 08 00 00 09 30 00	*
		202 00 33	30 OCT 19		330 30 30	0, 30 00	
MANHTN B KAN MANHATTN KAN STFO RES CAL MANHATTN KAN STFO RES CAL	39 13 51 N 39 09 45 N 37 24 11 N 39 13 51 N 37 24 11 N	263 22 54 263 31 09 237 49 29 263 22 54 237 49 29	409 311 152 409 152	00 55 16.60 00 55 21.70 00 55 51.00 00 55 53.00 02 28 30.00	011 48 30 4 011 42 30 4 120 00 00 010 52 00 4 300 00 00	52 25 00 43 00 00	* 580
VANCOUVER BC VANCOUVER BC SJUAN=G5 ARG TOKYO JAPAN AREGUIRA PER	35 40 11 N	236 44 57 236 44 57 291 22 46 139 32 28 288 30 31	105 650 58	02 30 49.00 02 31 09.50 08 02 42.00 09 03 39.74 09 34 11.40	015 30 00 011 03 00 021 24 48	43 00 00 13 06 00 07 38 00	*
MANHTN B KAN HIRROGTE ENG BONN B GER BONN B GER WMERA MT AUS	53 59 00 N 50 43 45 N 50 43 45 N	263 22 54 358 26 00 007 05 47 007 05 47 136 46 59	62 62	12 55 16.60 18 31 23.00 18 31 24.00 18 31 50.50 20 46 27.90	359 CO 00 013 37 00 012 11 00	51 00 00 48 24 00	*

. STATION	LATITUDE	LONGITU0E FAST	HEIGHT TIME IN IN METERS HR MIN		IMUTH OR ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			30 OCT 1958 (CONT)	ı			
WMERA MT AUS WMERA MT AUS WMERA MT AUS NA TAL INDIA CINCNATI B O	31 06 09 S 31 06 09 S 31 06 09 S 29 21 32 N 39 09 06 N	136 46 59 136 46 59 136 46 59 079 25 54 275 32 15	160 20 46 160 20 48 150 20 50 2924 21 36 23 14	34.60 328 07.90 322 53.40 160 52.98 009	00 00 36 00 06 00 54 48 *	34 30 00 59 48 00 73 00 00 34 43 00 * 18 30 00	
OAYTON B O O NOTYAGO N CANTON B O O AYTON B O N CANTON B O	39 50 14 N 39 50 14 N 41 04 50 N 39 50 14 N 41 04 50 N	275 44 03 275 44 03 278 26 02 275 44 03 278 26 02	249 23 14 249 23 14 249 23 15 249 23 15 23 15	51.00 012 54.00 013 18.50 010	30 00 05 00 * 20 00 * 53 00 * 16 00 *	19 31 00 56 54 00 * 45 00 00 * 61 30 00 * 57 00 00 *	
O E NOTYAO	39 50 14 N	275 44 03	249 23 15		27 00 *		
			31 OCT 1958		21 00 "	63 30 00 *	
UNION JOHSBG OAYTON B O ONSK-A.N.IRE ONSK-A.N.IRE ONSK-A.N.IRE	26 10 55 S 39 50 14 N 52 23 13 N 52 23 13 N 52 23 13 N	028 04 30 275 44 03 353 39 43 353 39 43 353 39 43	1876 01 33 249 09 46 86 18 24 66 18 24 86 18 25	50.00 179 11.00 016 21.00 016	19 00 * 00 00 50 00 * 51 00 * 53 00 *	03 18 00 * 42 00 00 02 00 00 * 64 54 00 * 24 12 00 *	
MEUOON FR CAMBR U ENG MEUOON FR DNSK-A.N.IRE ONSK-A.N.IRE	48 48 18 M 52 12 51 N 48 48 18 N 52 23 13 N 52 23 13 N	002 13 52 000 05 41 002 13 52 353 39 43 353 39 43	162 18 25	20.40 280 28.73 303 35.00 016	39 00 24 00 15 00 53 00 *	14 05 00 22 06 00 15 39 00 43 12 00 # 51 24 00 #	
MEUDON FR MEUDON FR ORFONESS ENG ONSK+A:N:IRE MEUDON FR	48 48 18 N 48 48 18 N 52 06 00 N 52 23 13 N 48 48 18 N	002 13 52 002 13 52 001 36 00 353 39 43 002 13 52	162 18 25 162 19 25 13 25 66 18 26 162 18 26	57.70 313 58.00 294 03.00 015	28 00 58 00 36 00 49 00 # 13 00	16 42 00 17 26 00 24 00 00 67 00 00 * 17 56 00	
CAMBR U ENG MEUOON FR FARNHAM ENG MEUDON FR CHELMSFD ENG	52 12 51 N 48 48 18 N 51 12 00 N 48 48 18 N 51 43 00 N	000 C5 41 002 13 52 359 12 00 002 13 52 000 30 00	28 1° 26 162 13 26 13 26 152 18 26 18 26	23.40 324 24.00 013 38.50 330	24 00 20 00 12 00 * 28 00 15 00 *	30 30 00 18 13 00 55 00 00 * 18 17 00 56 00 00 *	
NTN STEW ENG MEUOON FR ORFDNESS ENG CAMBR U ENG MEUDON FR	54 57 00 N 48 48 18 N 52 06 00 N 52 12 51 N 48 48 18 N	355 30 00 002 13 52 001 36 00 000 05 41 002 13 52	162 18 26 18 26 18 26 26 16 27 162 18 27	52.30 335 58.10 327 01.30 337	90 00 48 00 48 00 30 00 18 00	59 0 00 18 13 00 29 00 00 31 54 00 17 17 00	
CAMBR U ENG MEUDON FR MEUDON FR ORFONESS ENG MEUDON FR	52 12 51 N 48 48 18 N 48 48 18 N 52 06 00 N 48 48 18 N	000 05 41 002 13 52 002 13 52 001 36 00 002 13 52	28 18 27 152 19 27 162 18 27 18 28 162 18 28	40.10 352 55,71 357 00.00 357	36 00 36 00 20 00 36 00 46 00	28 24 00 16 23 00 15 27 00 25 00 00 14 41 00	
MEUDON FR CAMBP U ENG ORFONESS ENG ORFONESS ENG ADLAIO A 4US	48 48 18 N 52 12 51 N 52 06 00 N 52 06 00 N 34 55 14 S	002 13 52 000 05 41 001 36 00 001 36 00 138 36 14	162 18 28 28 18 28 18 28 18 29 55 19 08	26.7° 014 42.50 013 20.30 020	21 00 18 00 16 00 06 00 43 00 #	13 46 00 21 42 00 20 00 00 16 00 00 - 03 00 00 *	
ADLAIO C AUS AOLAIO A AUS PERTH AUS PERTH AUS PERTH AUS	34 44 00 5 34 55 14 5 32 00 07 5 32 00 07 5 32 00 07 5	138 40 00 138 36 14 115 51 10 115 51 10 115 51 10	19 09 55 19 09 5 20 41 5 20 41 5 20 41	52.00 235 03.50 319 09.80 319	21 00 * 00 00 18 00 54 00 36 00	- 29 00 00 * 84 00 00 21 48 00 21 42 00 26 42 00	
PERTH AUS PERTH AUS	32 00 07 S 32 00 07 S	115 51 10 115 51 10	5 20 47 5 20 47		30 00	34 54 00	
		>1 10	5 20 47 1 NOV 1958	20.30 169	30 00	31 54 00	
SJUAN-SS ARG	31 30 37 S	291 22 46					
SSLVDR C 9WI JOKNN OB FIN JOKNN OB FIN	24 03 59 N 60 48 50 N 60 48 50 N 60 48 50 N	285 27 49 023 30 09 023 30 09 023 30 09	650 07 52 15 16 44 103 16 44 103 16 44 103 16 44	30.30 227 30.40 227 40.40 227	30 00 * 42 00 54 00 18 00 12 00	06 24 00 * 22 42 00 22 42 00 25 18 00 29 24 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 16 45 103 16 45 103 16 45 103 16 45 103 16 45	19.70 223 31.70 220 42.60 217	06 00 18 00 54 00 36 00 18 00	33 C6 00 39 00 00 44 54 00 51 C6 00	
JOKNN OB EIN JOKNN OB EIN JOKNN OB EIN	60 48 50 N 60 48 50 N 60 48 50 N	023 30 C9 023 30 O9 023 30 O9	103 16 46 103 16 46 103 16 47	07.50 201 22.70 169	12 OC 24 OO 48 OO	58 24 00 57 06 00 75 48 00 60 12 00	

STATION	LATITUDE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION#	SLANT RANGE IN KM
			1 NOV 195	B (CONT)			
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN MEUOON FR	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 48 48 18 N	023 30 09 023 30 09 023 30 09 023 30 09 002 13 52	103 103 103 103 162	16 47 24.90 16 47 36.90 16 47 49.70 16 48 06.10 18 19 01.60	070 18 00 067 48 00 065 48 00 064 18 G0 295 38 00	48 24 00 43 06 00 37 54 00 33 06 00 11 07 00	
MEUDON FR MEUOON FR MEUOON FR MEUDON FR MEUOON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	18 19 27.90 18 19 46.40 18 19 56.50 18 20 07.30 18 20 22.20	303 21 00 309 20 00 312 41 00 316 39 00 321 53 00	13 03 00 14 12 00 14 43 00 15 14 00 15 44 00	
MEUOON FR MEUDON FR BUSSUM NETH MEUOON FR MEUOON FR	48 48 18 N 48 48 18 N 52 16 52 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 005 09 18 002 13 52 002 13 52	162 162 162 162	18 20 34.60 18 20 53.90 18 21 09.70 18 21 11.00 18 21 27.50	326 22 00 333 20 00 013 29 36 * 339 18 00 343 16 00	16 04 00 16 15 00 47 11 00 * 16 04 00 15 47 00	
MEUDON FR BUSSUM NETH MEUOON FR GRONNGN NETH MEUOON FR	48 48 18 N 52 16 52 N 48 48 18 N 53 12 18 N 48 48 18 N	002 13 52 005 09 18 -002 13 52 006 34 01 002 13 52	162 162 162	18 21 39.40 18 21 46.10 18 21 55.60 18 22 04.40 18 22 07.60	348 40 00 012 02 24 * 353 36 00 012 09 00 * 356 57 00	15 12 00 - 05 56 00 * 14 33 00 56 48 00 * 14 00 00	
BUSSUM NETH MEUDON FR. MEUDON FR STEENWK NETH MEUDON FR	52 16 52 N 48 48 16 N 48 48 18 N 52 47 29 N 48 48 18 N	005 09 18 002 13 52 002 13 57 006 06 38 002 13 52	162 162 162	18 22 15.10 18 22 24.30 18 22 37.10 18 22 47.30 18 23 02.50	010 44 48 * 001 18 00 004 25 00 009 47 00 * 009 50 00	58 42 00 # 13 11 00 12 26 00 58 54 00 # 10 58 00	
BUSSUM NETH	52 16 52 N	005 09 18		18 23 23•10	008 16 00 *	54 22 00 #	
			2 NOV ,19	58		•	
AMES A IOWA AMES A IOWA SJUAN-GS ARG HUANCAYO PER HUANCAYO PER	42 01 59 N 42 01 59 N 31 30 37 S 12 01 27 S 12 01 27 S	266 27 00 266 22 00 291 22 46 284 40 28 284 40 28	305 305 650 3476 3476	00 54 49.50 00 55 36.00 07 45 55.00 09 18 45.00 09 20 17.00	018 14 00 * 354 30 00 009 16 00 * 001 42 00 *	45 00 00 = 13 54 00 * = 40 00 00 *	; ;
COPNGN B DEN COPNGN B DEN AOLAIO C AUS	55 42 13 N 55 42 13 N 34 44 00 S	012 27 09 012 27 09 138 40 00	10 10	18 05 43.00 18 06 21.00 18 55 21.00	012 44 00 4 011 00 00 4 004 03 00	59 00 00 4	•
			3 NOV 19				
HUANCAYO PER HUANCAYO PER ORFDNESS ENG ORFDNESS ENG ORFDNESS ENG	12 01 27 S 12 01 27 S 52 06 00 N 52 06 00 N 52 06 00 N	284 40 28 284 40 28 001 36 00 001 36 00 001 36 00	3476 3476	09 11 16.00 09 12 15.00 16 05 45.50 18 06 12.40 18 06 34.60	001 00 00 000 23 GU 007 42 00 012 54 00 018 57 00		
PERTH AUS PERTH AUS PERTH AUS PERTH AUS PERTH AUS	32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S	115 51 10 115 51 10 115 51 10 115 51 10 115 51 10	5 5 5 5	20 18 19.60 20 19 41.30 20 21 12.00 20 27 52.40 20 24 15.30	292 37 00 276 04 00 243 44 00 204 02 00 184 31 00	21 09 00 29 52 00 36 40 00 30 25 00 20 14 00	
NA TAL INOIA NA TAL INOIA	29 21 32 N 29 21 32 N		1924 1924	22 05 53•68 22 13 23•91	007 35 54 006 46 48		
NA TAL INDIA	29 21 32 N		1924	23 49 49 92			
			4 NOV 1				
S FERNNOO SP SANTIAGO CHI SPETSAI I GR WOOMER AUS WOOMER AUS	36 27 42 N 33 33 44 S 37 16 30 N 31 06 06 S 31 06 06 S	289 18 43 023 09 00 136 46 54	162	05 07 18.90 07 26 24.00 16 37 16.00 16 57 12.51 18 36 54.24	008 20 00 012 15 00 009 26 24	* = 04 52 00 * 71 00 30 * = 96 21 00	* *
			5 NOV 1	1958			
SJUAN-GS ARG SJUAN-GS ARG CHELMSFD ENG NTN STEW ENG WOOMER AUS	31 30 37 5 31 30 37 5 51 43 00 8 54 57 00 8 31 06 06 5	291 22 46 N 000 30 00 N 355 30 00	650	07 15 11.00 08 51 19.00 17 39 38.00 17 39 46.00 18 22 G6.22	001 05 00 010 50 00 000 00 00	* = 34 54 00 * 54 30 00 37 00 00	* .

STATION	LATITUOE	LONGITLOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			6 NOV 195	8			
COLL C ALAS LAPLAT C ARG SJUAN-GS ARG LAPLAT C ARG LAPLAT C ARG	64 51 36 N 34 54 26 S 31 30 37 S 34 54 26 S 34 54 26 S	212 12 12 302 05 30 291 22 46 302 05 30 302 05 30	137 650	03 10 00.70 07 01 05.00 07 01 08.00 07 01 44.80 07 02 24.80	180 00 00 003 29 59 * 010 20 00 * 003 39 25 * 003 55 56 *	38 24 00 - 33 40 36 * - 48 54 00 * - 52 49 54 * - 71 27 30 *	
LAPLAT C ARG LAPLAT C ARG SJUAN-GS ARG AOLAIO C AUS WOOMER AUS	34 54 26 S 34 54 26 S 31 30 37 S 34 44 00 S 31 06 07 S	302 05 30 302 05 30 291 22 46 138 40 00 136 47 07	650 162	07 03 05.70 07 03 28.90 08 36 57.00 17 10 34.00 18 05 34.38	005 50 01 * 013 31 07 * 000 47 00 * 000 22 00 *	- 85 55 42 * - 85 35 30 * - 35 48 00 * - 72 30 00 * 36 04 16	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	18 05 44.82 18 05 50.21 18 06 01.40 18 06 06.15 18 06 09.81		35 50 35 35 38 56 35 00 50 34 44 42 34 29 17	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 06 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 46 54 136 47 07 136 47 07 136 47 07	162 162 162 162 162	18 06 14.36 18 06 17.00 18 06 18.08 18 06 23.76 18 06 27.25	001 13 24 *	34 02 02 57 43 00 # 33 49 44 33 12 25 32 59 53	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 67 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	18 96 30.22 18 96 39.17 18 96 44.94 18 96 53.48 18 96 56.46	202 09 32	<sup>2</sup> 2 43 41 31 46 26 31 10 05 30 10 19	
WOOMER AUS WOOMER AUS WOOMER AUS ADLAIO C AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 05 07 S 34 44 00 S 31 06 07 S	136 47 07 136 47 07 136 47 07 138 40 00 136 47 07	162 162 162	18 07 01.10 18 07 04.50 18 07 11.03 18 07 13.00 18 07 13.01	199 40 34 	29 09 04 28 49 52 27 54 40 57 00 00 # 27 48 00	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	18 07 18 40 18 07 21 40 18 07 26 32 18 07 29 88 18 07 32 26	194 54 00 192 57 58 192 04 52	27 03 14 26 44 56 26 07 44 25 48 00 25 24 22	,
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	18 07 34.32 18 07 38.38 18 07 41.98 18 07 45.34 18 07 47.81	191 37 37 190 34 55  189 02 20 188 24 43	25 09 40 24 27 32 24 10 16 23 46 08 23 18 29	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	18 07 50.44 18 07 53.59 18 07 56.25 18 07 59.69 18 08 03.27	187 56 42 187 17 53 186 32 56 186 00 40 185 19 52	23 07 52 22 22 12 22 10 44 21 59 24 21 33 29	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	18 08 05.00 18 08 07.90 18 08 10.89 18 08 13.20 18 08 16.60	184 55 44 184 27 04 183 54 04 183 30 00 182 53 06	21 11 53 21 00 40 20 38 28 20 21 17 19 57 36	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	18 09 19.50 16 08 22.35 18 08 25.14 18 08 26.69 18 08 31.18	182 19 48 181 50 20 181 22 05  180 24 04	19 38 24 19 18 00 18 58 52 18 48 54 15 06 23	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	16 08 34.46 18 08 37.47 18 08 42.80 18 08 49.38 18 08 51.55	179 54 22 179 26 20	17 56 31 17 36 00 16 52 12 16 17 28 15 54 32	•
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	18 98 53.63 18 99 02.77 18 99 05.40 18 09 08.46 18 09 11.73	175 32 20 175 10 44 174 45 14	15 50 24 14 53 53 14 38 42 14 18 18 13 59 56	
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	18 09 15.77 18 09 19.60 18 09 23.50 18 09 29.47 18 09 37.52	173 50 28 173 22 48	13 34 4e 13 12 18 12 50 17 12 07 55 11 30 40	

STATION		LATITU0E	LONGITUDE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION SLAN OR RANG DECLINATION* IN K
				6 NOV 1958	(CONT)		
WOOMER WOOMER WOOMER	AUS AUS AUS AUS	31 06 07 5 31 06 07 5	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	18 09 41.43 18 09 43.96 18 09 47.53 18 09 50.30 18 09 54.85	171 27 18 171 11 56 170 51 14 170 35 46	11 09 11 10 56 13 10 36 04 10 22 26 09 58 12
WOOMER WOOMER WOOMER	AUS AUS AUS AUS AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	18 09 58.18 18 10 00.97 18 10 05.64 18 10 09.13 18 10 14.18	169 52 16 169 36 22 169 10 44	09 41 20 69 27 11 09 03 18 08 44 20 08 20 35
	AUS AUS AUS AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	18 10 16.84 18 10 20.20 18 10 23.76 18 10 26.48 18 10 35.23	168 14 02 167 57 25	08 06 29 07 50 56 07 33 54 07 20 46 06 39 36
WOOMER WOOMER WOOMER	AUS AUS	31 06 07 S 31 06 07 S 31 06 07 S	196 47 07 136 47 07 136 47 07	162 162 162	18 10 38.90 18 10 55.53 18 11 12.82	166 30 04	05 09 22 03 55 08
		_		7 NOV 195			
COPNGN A WOOMER WOOMER WOOMER WOOMER	DEN AUS AUS AUS	55 44 41 N 31 06 07 5 31 06 07 5 31 06 07 5 31 06 07 5	012 33 69 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162	17 26 28.00 17 49 07.03 17 49 11.56 17 49 15.24 17 49 22.02	C10 50 00 <b>*</b> 217 10 55 215 19 19 213 55 44 211 18 36	57 12 00 * 33 56 53 33 33 04 33 13 41 32 32 28
WOOMER WOOMER WOOMER WOOMER WOOMER	AUS AUS AUS AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	17 49 26.90 17 49 32.72 17 49 35.48 17 49 37.94 17 49 41.89	209 34 26 207 30 00 206 20 20 205 38 20 204 14 10	32 13 16 31 26 56 31 18 32 31 01 41 30 32 24
ADLAIO C WOOMER WOOMER WOOMER WOOMER	AUS AUS AUS AUS	34 44 00 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	138 40 00 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162	17 49 42.00 17 49 44.22 17 49 50.01 17 49 52.49 17 49 55.68	001 29 00 * 203 32 46 201 32 17 200 51 36 199 52 05	- 49 30 00 * 30 17 53 29 34 44 29 16 48 28 50 56
WOOMER WOOMER WOOMER WOOMER WOOMER	AUS AUS AUS AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	17 49 59.28 17 50 02.59 17 50 06.10 17 50 11.98 17 50 14.34	198 41 20 197 49 16 196 48 00 195 10 16 194 35 20	28 26 24 28 02 24 27 36 29 26 51 36 26 34 05
WOOMER WOOMER WOOMER WOOMER WOOMER	AUS AUS AUS AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 135 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	17 50 18.33 17 50 21.68 17 50 26.23 17 50 29.74 17 50 33.40	193 23 42 192 35 28 191 28 52 190 38 46 139 48 58	26 01 24 25 35 53 25 01 34 24 36 29 24 06 54
WOOMER WOOMER WOOMER WOOMER WOOMER	AUS AUS AUS AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	17 50 37.68 17 50 40.37 17 50 42.15 17 50 44.47 17 50 47.25	188 44 56 198 14 10 187 51 18 187 50 13 186 41 46	23 35 53 23 14 20 23 00 43 22 45 29 22 24 18
WOOMER WOOMER WOOMER WOOMER WOOMER	AUS AUS AUS AUS	31 06 07 S 31 06 06 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 46 54 136 47 07 136 47 07 136 47 07	162 162 162 162 162	17 50 49.68 17 50 51.69 17 50 54.16 17 50 56.70 17 51 03.96	186 16 52 020 36 36 185 22 44 184 51 58 183 31 16	22 06 43 - 78 20 00 * 21 33 29 21 15 11 20 21 36
WOOMER WOOMER WOOMER WOOMER WOOMER	AUS AUS AUS AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07	162 162 162 162 162	17 51 05.67 17 51 02.20 17 51 12.44 17 51 14.56 17 51 17.76	183 07 52 182 44 24 181 57 40 181 34 30 181 07 44	20 10 03 19 52 48 19 22 48 19 07 48 18 46 48
WOOMER WOOMER WOOMER WOOMER WOOMER		31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07	162 162 162	17 51 20.78 17 51 24.43 17 51 29.16 17 51 31.56 17 51 35.64	180 01 16 179 18 00 178 54 36	18 25 34 17 54 45 17 27 58 17 11 24 16 46 12
WOOMER WOOMER WOOMER WOOMER	AUS AUS AUS		136 47 07 136 47 07 136 47 07	162 162 162	17 51 40.78 17 51 45.88 17 51 47.89 17 51 50.51 17 51 54.38	176 53 17 176 36 18 176 14 53	16 11 53 15 38 53 15 25 48 15 08 42 14 47 28

			LONGITUOE	IN	TIME GMT	AZ IMUTH OR	ELEVATION OR	SLANT RANGE
STATIO	N	LATITUOE	EAST	METERS	HR MIN SEC	RGT ASCEN *	OECLINATION*	IN KM
				7 NOV 1958	(CONT)			
WOOMER	AUS	31 06 07 S	136 47 07	162	17 51 57 658	175 21 40	14 26 24	
WOOMER WOOMER	AUS AUS	31 06 07 S 31 06 07 S	136 47 07 136 47 07	162 162	17 52 01.35 17 52 04.89	174 52 19 174 26 20	14 02 56 13 43 05	
WOOMER WOOMER	AUS AUS	31 06 07 S 31 06 07 S	136 47 07 136 47 07	162 162	17 52 07•21 17 52 09•46	174 07 48 173 53 46	13 29 10 13 14 56	
WOOMER	AUS	31 06 07 5	136 47 07	162	17 52 11•19	173 40 55	13 04 55	
WOOMER WOOMER	AUS	31 06 07 S 31 06 07 S	136 47 07 136 47 07	162 162	17 52 13.54 17 52 16.33	173 35 08 172 59 17	12 51 58 12 32 24	
WOOMER WOOMER	AUS AUS	31 06 07 S 31 06 07 S	136 47 07 136 47 07	162 162	17 52 19 • 16 17 52 21 • 71	172 45 32 172 30 00	12 18 54 12 04 23	
WOOMER	AUS	31 06 07 5	136 47 07	162	17 52 25 82	172 03 04	11 40 37	
WOOMER WOOMER	AUS	31 06 07 S 31 06 07 S	136 47 07 · 136 47 07 ·	162 162	17 52 30 98 17 52 35 24	171 30 11 171 06 40	11 12 29 10 51 07	
WOOMER WOOMER	AUS AUS	31 06 07 S 31 06 07 S	136 47 07 136 47 07	162 162	17 52 38 50 17 52 48 05	170 48 00 169 50 49	10 31 37 09 41 53	
WOOMER	AUS	31 06 07 S	136 47 07	162	17 52 57.55	169 01 55	08 52 19	
WOOMER WOOMER	AUS	31 06 07 S 31 06 07 S	136 47 07 136 47 07	162 162	17 53 07.18 17 53 17.67	168 13 23 167 22 34	08 05 02 07 13 59	
WOOMER WOOMER	AUS .	31 06 07 S 31 06 07 S	136 47 07 136 47 07	162 162	17 53 25 • 97 17 53 35 • 34	166 42 40 166 01 12	06 36 36 05 52 08	
WOOMER	AUS	31 06 C7 S	136 47 07		17 53 44.35	165 24 04	05 14 20	
WOOMER WOOMER	AUS	31 06 07 S 31 06 07 S	136 47 07 136 47 07	162 162	17 53 53.11 17 54 02.37	164 47 49 164 11 38	04 36 32 03 57 32	
MIL RAO		42 37 03 N	288 30 28	155	20 13 40.00	004 00 00	17 00 00	10.93
				8 NOV 195	8			
MIL RAO MIL RAO		42 37 03 N 42 37 03 N	288 30 28 288 30 28	155 155	04 25 35 80 04 26 38 60	305 12 00 283 30 00	38 24 00 55 18 00	1140 903
MIL RAO	MASS	42 37 03 N 42 37 03 N	288 30 28 288 30 28	155 155	04 27 41.00 04 29 32.20	227 00 00 174 06 00	63 18 00 37 30 00	854 1200
AOLAIO		34 44 00 S	138 40 00	133	17 30 55.00	001 12 00 *		
WOOMER HARROGT	AUS E ENG	31 06 06 S 53 59 00 N	136 46 54 358 26 00	162	17 32 30 54 18 24 42 00	017 35 00 * 012 50 00 *		
		,		9 NOV 195				
COLLEGE	ALAS	64 51 18 N	212 10 12		03 55 00+00	002 55 48 1	54 00 00	•
COPNGN ADLA I O		55 42 13 N 34 44 00 S	012 27 09 138 40 00	10 .	16 29 18.00 17 10 34.00	010 48 00 4		
WOOMER	AUS	31 06 06 S	136 46 54	162	17 10 42.74	019 20 00	* * 81 25 00	*
				10 NOV 195				
COPNGN JOKNN	OB FIN	55 44 41 N 60 48 50 N	012 33 09 023 30 09	103	16 06 35.00 16 08 05.60	010 00 00 ·	* 58 00 00 45 <b>36</b> 00	16
JOKNN I	OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	16 08 14•50 15 08 21•50	347 06 00 353 06 00	46 18 00 46 <b>3</b> 0 00	
JOKNN		60 48 50 N	023 30 09	103	16 08 28 • 60	359 12 00	46 18 00	
JOKNN	OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	16 08 36.90 16 08 52.30	006 30 00 017 54 00	45 36 00 43 30 00	
JOKNN	OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	16 09 10.50 16 09 19.60	029 06 00 033 48 00	40 06 00 38 00 00	
	OB FIN	60 48 50 N	023 30 09	103	16 09 27 • 20	037 12 00	36 24 00	
JOKNN	OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103	16 09 36.70 16 09 47.30	041 00 00 044 36 00	34 18 00 32 06 00	
JOKNN	OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	16 09 59.50 16 10 13.50	048 12 00 051 24 00	29 42 00 27 12 00	
	OB FIN	60 48 50 N	023 30 09	103	16 10 22+20	053 18 00	25 42 00	
	C AUS	31 06 06 S 34 44 00 S	136 46 54 138 40 00	162	16 48 13 69 16 50 12 00	015 35 12 015 04 00	* - 65 30 00	
HORSBE	ROG ENG	54 57 00 N 50 53 00 N	355 30 00 000 15 00		17 42 Gâ.00 17 42 10.00	000 GO GO 010 20 00		*
	OB FIN	60 48 50 N	023 30 09	103	17 42 55 86	301 06 00	16 00 00	
JOKNN	OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	17 43 06.50 17 43 15.10	303 12 00	17 30 00 18 54 00	
JOKNN	OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	17 43 25 80 17 43 36 30	305 48 00	20 30 00 22 24 00	
	OB FIN	60 48 50 N	023 30 09	103	17 43 44•60		24 00 00	
JOKNN	OB FIN	60 48 50 N 60 48 50 N	023 30 09	103 103	17 43 54.50 17 44 03.70	310 48 00	26 00 00 27 54 00	
JOKNN	OB FIN	60 48 50 N	023 30 09	103 103	17 44 14•10 17 44 29•50	317 12 00	34 06 00	
JOKNN	OB FIN	60 48 50 N	023 30 09	103	17 44 39.80	320 42 00	37 00 00	

STATION	LATITUOE	LONGITUOE		AZIMUTH ELEVATION OR OR	SLANT RANGE
		2.13	ME TERS HR MIN SEC	RGT ASCEN * OECLINATION*	IN KM
JOKNN OB FIN	60 48 50 N	022 20 00	10 "NV 1958 (CONT)		
JOKNN OB FIN JOKNN OB FIN ORFONESS ENG	60 48 50 N 60 48 50 N 52 06 00 N	023 30 09 023 30 09 023 30 09 001 36 00	17 44 50 • 40 103 17 44 59 • 40 103 17 59 16 • 20 19 19 31 • 00	324 48 00 39 48 00 329 00 00 42 24 00 303 42 00 65 69 00 349 42 00 13 18 00	
			11 NOV 1958		
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 16 06 53.50 103 16 07 00.60 103 16 07 12.20 103 16 07 20.50 103 16 07 29.90	298 12 00 29 48 00 300 42 00 31 30 00 305 12 00 34 18 00 309 06 00 36 24 00 314 06 00 38 48 00	
JOKAN OB FIN JOKAN OB FIN BLFST-BINIR BLFST-BINIR	60 48 50 N 60 48 50 N 54 33 00 N 54 33 00 N	023 30 09 023 30 09 354 06 00 354 06 00	103 16 07 39.20 103 16 07 47.80 18 53 40.00 18 54 08.00	319 36 00 41 00 00 325 42 00 42 48 00 010 57 00 \$ 53 00 00 \$ 010 25 00 \$ 55 00 00 \$	
			12 NOV 1958	33 00 00 *	
STIAGO R CHI SANTIAGO CHI ADLAID C AUS SUTTON ENG NTN STEW ENG	33 33 42 S 33 33 44 S 34 44 00 S 51 22 00 N 54 57 00 N	289 18 48 289 18 43 138 40 00 359 48 00 355 30 00	573 06 33 17.00 580 06 33 17.00 15 59 40.00 18 26 45.00 18 26 53.00	016 36 36 * - 69 17 00 * 016 36 36 * - 67 17 00 * 010 57 00 * 50 30 00 * 000 00 00 00 00 00 00 00 00 00 00	
SUTTON ENG	51 22 00 N	359 48 00	18 27 42.00	009 33 00 * 52 00 00 *	
			13 NOV 1958		
MIL RAD MASS MIL RAD MASS MIL RAD MASS MIL RAD MASS SANTIAGO CHI	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 33 33 44 S	286 30 28 288 30 28 288 30 26 288 30 26 289 18 43	155 04 03 50.00 155 04 04 9.00 155 04 05 50.00 155 04 07 07.00 580 06 04 52.00	256 30 00 12 18 00 241 18 00 18 54 00 225 18 00 16 36 00 212 42 00 13 12 00 015 05 5: * 68 32 00 *	1709 1722 1855 2073
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09	103 17 59 16.20 103 17 59 24.30 103 17 59 33.60	303 42 00 32 36 00 304 12 00 35 06 00 304 42 00 38 00 00	
			14 NOV 1958		
COLLEGE ALAS ORFONESS ENG ORFONESS ENG ORFONESS ENG	64 51 18 N 52 06 00 N 52 06 00 N 52 06 00 N	212 10 12 001 36 00 001 36 00 001 36 00	04 56 39.00 17 26 34.20 17 27 58.10 17 28 21.90	022 48 00 <b>*</b> 67 18 C0 <b>*</b> 006 45 00 13 12 00 00 034 42 00 11 06 00	
MIL RAD MASS	42 37 03 N		15 NOV 1958		
MIL RAO MASS MIL RAO MASS MIL RAD MASS COPNGN B DEN	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 55 42 13 N	288 30 26 288 30 28 288 30 28 288 30 28 012 27 09	155 02 58 44 60 155 03 01 47 00 155 03 02 48 40 155 03 05 07 30 10 18 28 12 00	293 18 00 19 36 00 232 54 00 31 24 C0 212 30 00 26 48 00 187 60 00 13 42 00 014 35 00 # 48 00 00 #	1211
			16 NOV 1958	•	
PT WASHING NY JOKNIN OB FIN JOKNIN OB FIN JOKNIN OB FIN JOKNIN OB FIN	40 49 48 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	285 17 24 023 30 09 023 30 09 023 30 09 023 30 09	00 06 32.00 103 14 41 28.20 103 14 41 41.10 103 14 41 51.60 103 14 42 00.60	248 CO OO 22 24 OO 338 42 OO 42 OO OO 349 C6 OO 43 18 OO OO 55 12 OC 43 18 OO	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 46 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 14 42 11.80 103 14 42 33.10 103 14 42 36.90 103 14 42 52.20 103 14 43 00.80	C13 54 00 42 12 00 028 00 00 36 48 00 031 12 00 37 36 00 037 48 00 34 54 00 041 30 00 32 12 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 14 43 29.40 103 14 43 54.60 103 14 44 05.00 103 14 44 13.30 103 14 44 24.70	050 48 00 27 36 00 056 30 00 23 24 00 058 24 00 21 48 00 059 48 00 20 36 00 061 48 00 19 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 14 44 40.80 103 14 44 53.10 103 14 45 03.60 103 14 45 15.20 103 14 45 29.10	063 30 00 17 06 00 065 00 00 15 36 00 066 00 00 14 30 00 067 06 00 13 18 00 068 12 00 12 00 00	
JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 14 45 41.50 103 14 45 54.10	069 12 00 10 48 00 070 00 00 09 48 <b>0</b> 0	

STATION	LATITUOE	LONG I TUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			16 NOV 1958	(CONT)			
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103	14 46 04.00 14 46 12.90 16 15 17.20 16 15 32.50 16 15 52.30	070 42 00 971 12 00 301 06 00 302 24 00 304 30 00	09 00 00 08 18 00 13 48 00 15 54 00 19 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	16 16 01.10 16 16 18.30 16 16 34.50 16 16 59.60 16 17 10.00	305 30 00 307 42 00 310 42 00 310 36 00 319 42 00	20 30 00 23 42 00 27 12 00 33 30 00 36 30 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 46 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	16 17 20.80 16 17 38.20 16 17 55.30 16 18 14.50 16 18 26.70	323 48 90 332 18 00 344 06 00 001 54 00 016 00 00	39 48 00 45 24 00 50 36 00 55 00 00 56 12 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	16 18 40.50 16 18 50.60 16 19 03.80 16 19 04.40 16 19 14.60	021 24 00 041 54 00 043 24 00 053 24 00 060 36 00	55 30 00 53 48 00 56 42 00 50 42 00 47 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	16 19 28 80 16 19 29 40 16 19 40 20 15 19 49 90 17 51 09 70	058 24 00 068 24 00 073 00 00 076 18 00 298 12 00	43 30 00 43 30 00 40 18 00 37 48 00	٠
BUSSUM NETH JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	52 16 52 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	005 09 18 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103	17 51 09.70 17 51 16.90 17 51 24.60 17 51 33.60 17 51 42.00	011 43 30 # 297 48 00 297 24 00 296 54 00 296 24 00	12 36 00 - 47 42 00 * 13 30 00 14 30 00 15 36 00	
HERSTMCX ENG JOKNN OB FIN BUSSUM NETH ORFONESS ENG JOKNN OB FIN	50 52 01 N 60 48 50 N 52 16 52 N 52 06 00 N 60 48 50 N	000'20 16 023 30 09 005 09 18 001 36 00 023 30 09	32 103	17 51 50 00 17 51 50 20 17 51 52 20 17 51 56 20 17 51 59 00	001 00 00 295 54 00 010 50 30 * 000 18 00 295 12 00	16 48 00 14 00 00 18 06 00 53 42 00 # 16 27 36	
ORFDNESS ENG JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	52 06 00 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	001 36 00 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103	17 52 C5.60 17 52 08.70 17 52 15.30 17 52 24.90 17 52 33.60	003 00 00 294 30 00 293 48 00 292 54 00 291 54 00	19 30 00 16 55 12 21 00 00 22 18 00 24 06 00	
STEENWK NETH JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	52 47 29 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	006 06 38 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103	17 52 37.60 17 52 43.20 17 52 50.60 17 52 58.50 17 53 68.40	009 45 46 # 290 36 00 289 36 00 288 18 00 286 54 00	25 54 00 58 06 00 * 28 06 00 29 42 00 31 36 00	
JOKNN OB FIN JOKNN OB FIN BUSSUM NETH JOKNN OB FIN MIL RAD MASS	60 46 50 N 60 48 50 N 52 16 52 N 60 48 50 N 42 37 03 N	023 30 09 023 30 09 005 09 18 023 30 09 288 30 28	103 103 103 155	17 53 15.30 17 53 23.60 17 53 29.50 17 53 34.50 21 21 16.00	264 48 00 282 48 00 007 27 24 * 279 24 00	33 48 00 36 24 00 39 00 00 54 51 00 * 42 24 00 14 30 00	10/0
			17 NOV 1958				1369
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103 103	15 36 35.90 15 36 48.10 15 36 56.80 15 37 09.30 15 37 18.30	304 30 00 306 24 00 308 12 00 310 42 00 312 48 00	19 36 00 21 36 00 23 18 00 25 48 00 27 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	15 37 28.90 15 37 38.10 15 37 48.00 15 37 58.70 15 38 08.70	315 48 00 318 48 00 322 30 00 327 12 00 332 18 00	30 18 00 32 36 00 35 06 00 37 54 00 40 36 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	15 38 16.20 15 38 25.90 15 38 37.30 15 38 50.00 15 38 58.90	336 48 00 343 36 00 352 24 00 003 36 00 011 48 00	42 30 00 45 00 00 47 18 00 48 54 00 49 24 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09	103 103 103	15 39 07.00 15 39 14.50 15 39 24.20	019 36 00 026 12 00 034 36 00	49 18 00 48 42 00 47 24 00	

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			17 NOV 1958	(CONT)			
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	15 39 33.10 15 39 42.20 15 39 51.30 15 40 01.80 15 40 13.90	041 30 00 047 30 00 052 54 00 058 12 00 063 12 00	45 42 00 43 48 00 41 42 00 39 12 00 36 18 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	15 40 45.70 15 41 05.30 15 41 18.00 15 41 28.30 15 41 40.60	072 54 00 076 54 00 079 06 00 030 36 00 082 12 00	29 30 00 25 42 00 23 36 00 22 00 00 20 12 00	
JOKNN OB FIN LONDERY:N:IR JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 55 00 00 N 60 48 50 N 60 48 50 N	023 30 09 352 39 00 023 30 09 023 30 09 023 30 09	103 103 103 103	15 41 49.60 17 10 46.00 17 12 15.40 17 12 24.50 17 12 31.90	083 12 00 000 00 00 299 18 00 299 06 00 298 54 00	19 00 00 30 00 00 17 36 00 19 00 00 20 24 00	
JOKNN OF FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	17 12 43.30 17 12 53.70 17 13 05.30 17 13 17.40 17 13 27.60	298 30 00 298 12 00 297 42 00 297 06 00 296 24 00	22 30 00 24 36 00 27 12 00 30 12 00 33 06 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 022 30 09	103 103 103 103 103	17 13 37.10 17 13 47.10 17 13 56.50 17 14 05.80 17 14 14.30	295 42 00 294 48 00 293 42 00 292 18 00 290 42 00	36 06 00 39 36 00 43 12 00 47 06 00 51 00 00	
JOKNN OB FIN JOKNN OB FIN	60 46 50 N 60 48 50 N 60 48 50 N	023 30 C9 023 30 09 023 30 09	103 103 103	17 14 23.30 17 14 32.00 17 14 41.20	288 24 00 285 18 00 280 18 00	55 30 00 60 18 00 65 36 00	
1			18 NOV 195	18	,		
RELCHER CAN BELCHER CAN BELCHER CAN BELCHER CAN BELCHER CAN	57 56 12 N 57 56 12 N 57 56 12 N 57 56 12 N 57 56 12 N	265 49 33 265 49 33 265 49 33 265 49 33 265 49 33		01 00 30.00 01 00 45.00 01 01 15.00 01 01 30.00 01 01 45.00	019 02 00 * 018 30 00 * 017 32 00 * 017 09 00 * 016 50 00 *	72 10 00 * 71 25 00 * 68 55 00 * 67 05 00 * 65 20 00 *	
MIL RAD MASS JOKNN OR FIN JOKNN OR FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	42 37 03 N 60 48 50 t 60 48 50 N 60 48 50 N 60 48 50 N	288 30 28 023 30 09 023 30 09 023 30 09 023 30 09	155 103 103 103 103	13 59 42.00 14 54 29.00 14 54 40.60 14 54 49.70 14 55 00.00	302 54 00 303 48 00 306 18 00 308 30 00 310 24 00	30 18 00 20 36 00 22 42 00 24 30 00 26 42 00	505
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	14 55 10 • 00 14 55 1 • 20 14 55 28 • 10 14 55 37 • 30 14 55 47 • 40	314 18 00 317 36 00 321 06 00 325 30 00 330 42 00	28 48 00 30 48 00 32 54 00 35 12 00 37 30 00	
JOKNN 03 FIN JOKNN 08 FIN JOKNN 08 FIN JOKNN 08 FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	14 55 55.0C 14 56 03.20 14 56 11.40 14 56 19.40 14 56 26.80	335 18 00 340 36 00 346 24 00 352 30 00 358 30 00	39 12 00 40 42 00 42 12 00 43 24 00 44 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	14 56 35.50 14 56 42.30 14 56 51.20 14 57 00.60 14 57 09.20	005 48 00 011 36 00 018 54 00 026 06 00 032 18 00	44 18 00 44 24 00 43 54 00 43 00 00 41 36 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	14 57 19.30 14 57 29.00 14 57 41.60 14 57 53.60 14 58 07.00	038 36 00 044 06 00 050 12 00 055 00 00 059 30 00	39 54 00 38 06 00 35 16 00 32 54 00 30 12 00	
OKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	14 58 17.30 14 58 33.00 14 58 52.50 14 59 13.60 14 59 34.00	062 24 00 066 18 00 070 12 00 073 24 00 075 48 00	28 12 00 25 24 00 22 18 00 19 18 00 16 48 00	
JOKNN OR FIN JOKNN OR FIN JOKNN OR FIN JOKNN OR FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 20 09	103 103	14 59 50.70 15 00 01.70 15 00 19.70 15 00 39.00 16 29 04.20	077 36 00 078 42 00 080 12 00 081 30 00 301 00 00	14 48 00 13 36 00 11 54 00 10 12 00 11 06 00	

STATION	LATITUOE	LONGITUOE FAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELFVATION OR OECLINATION*	SLANT RANGE IN KM
			18 NOV 1958	(CONT)			
JOKNN OB EIN JOKNN OB EIN JOKNN OB EIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	16 29 17.20 16 29 33.30 16 29 48.80 16 30 02.00 16 30 18.30	301 12 00 301 30 00 301 54 00 302 18 00 302 48 00	12 36 00 14 48 00 17 06 00 19 12 00 22 12 00	
JOKNN 08 FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	16 30 33.90 16 30 51.00 16 31 02.70 16 31 14.00 16 31 29.60	303 30 00 304 18 00 305 00 00 305 54 00 307 36 00	25 36 00 29 48 00 33 12 00 37 00 00 42 54 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	16 31 41.10 16 31 53.20 16 32 02.90 16 32 13.40 16 32 26.30	309 12 00 310 48 00 314 36 00 319 48 00 331 54 00	48 00 00 54 18 00 59 30 00 65 54 00 73 48 00	
JOKNN OB FIN JOKNN OB FIN PRET B S AF MEUDON FR MEUDON FR	60 48 50 N 60 48 50 N 25 43 43 S 48 48 18 N 48 48 19 N	023 30 09 023 30 09 028 12 42 002 13 52 002 13 52	103 103 1311 162 162	16 33 15.50 16 33 34.20 17 49 41.50 18 05 02.00 18 05 31.40	097 12 00 105 00 00 022 21 00 * 346 39 00 352 14 00	66 42 00 56 24 00 - 01 24 00 * 10 23 00 12 41 00	
MEUDON FR STEENWK NETH MEUDON FR MEUDON FR CHELMSFD ENG	48 48 18 N 52 47 29 N 48 48 18 N 48 48 10 N 51 43 00 N	002 13 52 006 06 38 002 13 52 002 13 52 000 30 00	162 162 162	18 05 43.60 18 05 49.20 18 05 54.40 18 06 07.60 18 06 20.00	354 45 00 012 20 00 * 357 14 00 000 23 00 009 00 00 *	13 34 00 57 12 00 * 14 25 00 15 23 00 60 00 00 *	
MEUDON FR  JOKNN OB FIN  JOKNN OB FIN  MEUDON FR  JOKNN OB FIN	48 48 18 N 60 43 50 N 50 48 50 N 48 48 18 N 60 48 50 N	002 13 52 023 30 09 023 30 09 002 13 52 023 30 09	162 103 103 162 103	18 06 22 • 20 18 06 25 • 60 18 06 31 • 60 18 06 33 • 50 18 06 41 • 00	004 07 00 275 48 00 274 18 00 007 12 00 271 42 00	16 27 00 22 24 00 23 18 00 17 10 00 24 42 00	
MEUDON FR  JOKNN OB FIN  JOKNN OB FIN  MEUDON FR  MEUDON FR	48 48 18 N 60 48 50 N 60 48 50 N 48 48 18 N 48 48 18 N	002 12 52 023 30 09 023 30 09 002 12 52 002 13 52	162 103 103 162 162	18 06 46.20 18 06 50.60 18 07 00.20 19 39 37.80 19 39 53.20	010 45 00 268 42 00 265 30 00 321 24 00 321 26 00	17 56 00 26 06 00 27 24 00 06 56 00 09 27 00	
			19 NOV 195	58			
ODAY CAN BELCHER CAN BELCHER CAN JOKNN OB FIN JOKNN OB FIN	57 34 57 N 57 56 12 N 57 56 12 N 60 48 50 N 60 48 50 N	265 47 35 265 49 33 265 49 23 023 30 09 023 30 09	103 103	00 16 57.80 00 17 36.00 00 17 46.00 15 43 22.40 15 43 36.50	328 04 08 341 48 00 346 46 00 300 12 00 300 42 00	31 29 34 42 30 00 45 06 00 09 12 00 10 48 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 49 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	15 43 54.80 15 44 05.20 15 44 20.90 15 44 30.30 15 44 41.30	301 42 00 302 24 00 303 24 00 304 06 00 305 06 00	12 54 00 14 18 00 16 36 00 18 06 00 19 54 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	15 44 51.90 15 45 05.70 15 45 14.40 15 45 29.20 15 45 40.90	306 12 00 307 42 00 308 54 00 311 24 00 313 42 00	22 00 00 24 42 00 26 42 00 30 36 00 33 54 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 46 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 07	103 103 103 103 103	15 45 53.00 15 46 07.50 15 46 21.00 15 47 09.50 15 47 21.70	316 48 00 321 42 00 328 06 00 020 18 00 039 12 00	37 48 00 43 06 00 48 30 00 53 24 00 62 30 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 50 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103 103 103 103	15 47 36.80 15 47 55.20 15 48 C2.40 15 48 09.80 15 48 17.70	058 24 00 073 30 00 077 30 00 081 06 00 084 06 00	58 24 00 51 36 00 48 54 00 46 06 00 43 18 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09	103	15 48 31.10 15 48 48.80 15 48 57.60 15 49 20.70 15 49 44.00	092 24 00 094 00 00 097 12 00	38 54 00 33 54 00 31 36 00 26 36 00 22 18 00	
OONREAY SCOT THURSO SCOT CHELMSFO ENG	58 36 00 N 58 36 00 N 51 43 00 N	356 30 00		17 18 25.00 18 54 44.20 18 54 52.00	017 55 00	* 51 30 00	*

		LONGITUOE	HEIGHT	TIME CUT			
STATION	LATITUOE	EAST	IN METERS	TIME GMT IN HR MIN SEC	AZ I MUTH OR	ELEVATION OR	SLANT RANGE
				THE SEC	RGT ASCEN *	OECLINATION*	IN KM
SABNHAM SUC			19 NOV 1956	(CONT)			
FARNHAM ENG ROYAL EONBG MIL RAD MASS	51 12 00 N 55 55 30 N 42 37 03 N	359 12 00 356 48 59	146	18 55 35.00 18 55 50.00	345 00 00 018 20 00 *	30 00 00 72 00 00 *	
THE NAME PLANTS	42 37 U3 N	288 30 28	155	22 02 15•00	185 36 00	43 24 00	585
MIL RAD MASS	42 37 03 N	288 30 28	20 NOV <b>195</b> 8				
MIL RAD MASS THURSO SCOT	42 37 03 N 58 36 00 N	288 30 28 356 30 00	155	12 43 58.00 14 14 06.00	044 06 00 325 36 00	04 48 00 06 54 00	1368 1228
THURSO SCOT MIL RAD MASS	58 36 00 N 42 37 03 N	356 30 00 288 30 28	155	18 04 38.70 18 05 44.70 20 30 14.00	014 20 00 # 015 35 00 #	47 30 00 <b>*</b> 70 30 00 <b>*</b>	
MIL RAD MASS	42 37 03 N	288 30 29	155	22 03 35 00	036 24 00 223 42 00	16 18 00	1050
CAMBRDG MASS CAMBRDG MASS	42 22 47 N 42 22 47 N	288 52 14 288 52 14	24	22 44 12.00 22 45 08.00	352 00 00 000 00 00	27 36 00 09 00 00	745
CAMBRDG MASS CAMBRDG MASS	42 22 47 N 42 22 47 N	288 52 14 288 52 14	24 24	22 45 50.00 22 46 13.00	010 00 00 015 00 00	11 00 00 10 00 00	
MIL RAO MASS	42 37 03 N	288 30 28	155	22 51 32.00	095 30 00	11 00 00 06 06 00	2200
			21 NOV 195	В		. 30 00 00	2300
CAMBROG MASS	42 22 47 N 42 22 47 N	288 52 14 288 52 14	24	00 18 45.00	328 00 00	07 00 00	
CAMBRDG MASS MIL RAD MASS	42 22 47 N 42 37 03 N	288 52 14 288 30 28	24 24	00 18 45.00 00 19 04.00	326 00 00 326 00 00	07 00 00 07 30 00	
MIL RAD MASS	42 37 03 N	288 30 28	155 155	00 20 13.00 00 22 05.00	329 06 00 332 18 00	16 00 00 40 54 00	1500 850
MIL RAO MASS MIL RAD MASS	42 37 03 N 42 37 03 N	288 30 28 288 30 28	155 155	00 23 21.00 00 27 45.00	010 46 00	78 54 00	610
SENDAI J SENDAI J	38 15 22 N 38 15 22 N	140 51 56 140 51 56	45 45	10 55 59.00	145 12 00 304 30 00	12 18 00 33 12 00	1850
SENOAI J	38 15 22 N	140 51 56	45	10 59 16.00	224 30 00 196 54 00	30 36 00 15 54 00	
NTN STEW ENG ARMG B N IRE	54 57 00 N 54 21 12 N	355 30 00 353 21 12		17 13 32.00 18 49 41.60	000 00 00 022 02 00 *	27 00 00	•
ROYAL EDNAG LONDERY:N.IR CAMBROG MASS	55 55 30 N 55 00 00 N	355 48 59 352 39 00	146	18 49 43.60 18 50 43.00	020 24 00 #	64 00 00 # 41 00 00 # 43 00 00	
CAMERDG MASS	42 22 47 N	288 52 14	24	21 52 46.40	012 00 00	05 00 00	
CAMBRDG MASS CAMBRDG MASS		289 52 14 288 52 14 288 52 14	24	23 26 45 60 23 26 54 00	346 00 00 345 CO 00	07 00 00 09 00 00	
MIL RAO MASS	42 37 03 N	288 52 14 288 30 28	24 155	23 28 02 • 40 23 29 16 • 00	355 00 00 016 48 00	22 00 00 31 48 00	778
			22 NOV 195	8			
MAN B MTHMAM MAN B MTHMAM	39 13 51 N 39 13 51 N	263 22 54 263 22 54	409 409	00 59 49.50 01 00 12.00	C11 15 49 #	60 20 00 #	
COLLEGE ALAS	64 51 18 N 60 48 50 N	212 10 12 023 30 09	103	04 03 20 00 14 44 37 00	010 46 31 <b>*</b> 019 44 00 <b>*</b>	62 26 00 <b>*</b> 10 30 00 <b>*</b>	
JOKNN OB FIN	60 48 50 N	023 30 09	103	14 44 44.80	309 18 00 310 30 00	24 18 00 26 00 00	
JOKAN OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	14 44 52 60 14 45 03 20	312 06 00 314 24 00	27 48 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	14 45 11 80 14 45 21 30	316 36 00 319 30 00	30 42 00 33 12 00 36 18 00	
JOKNN OB FIN JOKNN OB FIN	60 48 50 N	023 30 09	103	14 45 29.20	322 30 00	39 00 00	
JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	14 45 38.20 14 45 47.10	326 42 00 331 42 00	42 12 00 45 30 00	
JOKNN OS FIN JOKNN OS FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	14 45 58.50 14 46 06.10	339 42 00 346 06 00	49 48 00 52 24 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	14 46 14.40	355 00 00	55 00 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N	023 30 09	103 103	14 46 26.60 14 46 33.50	010 06 00 019 36 <b>00</b>	57 24 00 57 48 00	
JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	14 46 41.00 14 46 46.70	029 48 00 067 24 00	57 30 00 54 48 00	
JOKNN OR FIN	60 48 50 N	023 30 09	103	14 46 47 80	038 42 00	56 30 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N	023 30 09	103	14 46 56.40 14 47 04.70 14 47 13.10	048 30 00 056 36 00	54 30 00 52 06 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	14 47 23.60 14 47 34.20	063 30 00 070 18 00	49 18 00 45 36 00	•
JOKNN OB FIN	60 48 50 N	023 30 09	103	14 47 47.20	075 42 00	42 00 00	
JOKAN OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	14 43 04.30 14 48 19.60	085 42 00 089 00 00	37 48 00 33 00 00	
JOKNN OB FIN	60 48 50 N 60 48 50 N	023 30 09 023 30 09	103 103	14 48 37.40 14 48 52.30	091 54 00 093 54 00	29 12 00 25 18 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	14 49 13.20	096 06 00	22 30 00	
				1 15420	0,0 00 00	19 12 00	

STATION	LATITUOE	LONGITUOE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			22 NOV 195	8 (CONT)			
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN MIL RAD MASS MIL RAO MASS	60 48 50 N 60 48 50 N 60 48 50 N 42 37 03 N 42 37 03 N	023 30 09 023 30 09 023 30 09 268 30 28 288 30 28	103 103 103 155 155	14 49 33.70 14 49 46.10 14 49 57.60 16 06 52.00 16 07 09.00	097 48 00 098 42 00 099 24 00 315 36 00 324 36 00	16 24 00 14 54 00 13 30 00 19 18 00 18 48 00	833 852
MIL RAD MASS MIL RAD MASS MEUDON FR NTN STEW ENG MEUDON FR	42 37 03 N 42 37 03 N 48 48 18 N 54 57 00 N 48 48 18 N	288 30 28 288 30 28 002 13 52 355 30 00 003 13 52	155 155 162	16 09 29.60 16 11 31.50 17 53 26.90 17 53 40.00 17 53 41.60	009 54 00 022 36 00 238 21 CO 000 00 00 240 32 00	07 48 00 00 30 00 16 11 00 53 00 00 18 14 00	1470 2 <b>26</b> 0
MEUDON FR MEUDON FR MEUDON FR MEUDON FR MEUDON FR	48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	17 53 53.90 17 54 04.30 17 54 14.10 17 54 28.70 17 54 42.60	242 37 00 244 27 00 246 36 00 250 06 00 254 04 00	20 03 00 21 45 00 23 25 00 26 00 00 28 39 00	
MEUOON FR MEUOON FR MEUDON FR MEUDON FR MEUDON FR	48 48 13 N 48 48 18 N 48 48 18 N 48 48 18 N 48 48 18 N	002 13 52 002 13 52 002 13 52 002 13 52 002 13 52	162 162 162 162 162	17 54 56.50 17 55 11.00 17 55 23.40 17 55 37.60 17 55 54.50	258 49 00 C04 46 00 010 45 00 018 49 00 029 45 00	31 27 00 34 25 00 36 53 00 39 28 00 41 47 00	
MEUDON FR MEUDON FR MEUDON FR CAMBROG MASS CAMBROG MASS	48 48 18 N 48 48 18 N 48 48 13 N 42 22 47 N 42 22 47 N	002 13 52 002 13 52 002 13 52 002 13 52 288 52 14 288 52 14	162 162 162 24 24	17 56 07.40 17 56 20.10 17 56 33.60 22 31 23.80 22 31 51.60	039 03 00 048 41 00 058 21 00 007 00 00 011 00 00	42 49 00 42 55 00 42 17 00 12 00 00 12 00 00	
CAMBRDG MASS CAMBRDG MASS CAMBRDG MASS PT WASHNG NY MIL RAO MASS	42 22 47 N 42 22 47 N 42 22 47 N 40 49 48 N 42 37 C3 N	285 52 14 288 52 14 288 52 14 286 17 24 288 30 28	24 ·24 24 155	22 32 38 10 22 32 53 80 22 33 07 60 22 33 29 00 23 26 56 10	024 00 00 028 00 00 032 00 00 037 18 00 344 30 00	16 00 00 16 00 00 17 00 00 14 36 00 14 18 00	074
MIL RAD MASS	42 37 03 N 42 37 03 N	288 30 28 288 30 28	155	23 29 15.50	017 24 00	32 48 00	972 420
		200 30 20	155 23 NOV 195	23 3 <b>2</b> 50.90	109 24 00	20 00 00	740
AMES A IOWA OAYTON 5 O AMES A IOWA AMES IOWA MANHIN A KAN	42 01 59 N 39 50 14 N 42 01 59 N 42 01 43 N 39 15 58 N	265 22 00 275 44 03 266 22 00 265 20 59 263 22 38	305 249 305 403	00 03 15.50 00 04 03.50 00 04 04.65 00 04 21.40 00 04 41.07	000 00 00 012 08 30 * 009 00 00 008 15 12 * 021 08 54	09 48 00 56 30 00 * 13 06 00 59 55 35 * 08 44 00	
AMES IOWA DAYTON B O AMES A IOWA AMES IOWA CAMERDG MASS	42 01 43 N 39 50 14 N 42 01 59 N 42 01 43 N 42 22 47 N	266 20 59 275 44 03 266 22 00 266 20 59 288 52 14	249 305 24	50 04 45.40 90 04 49.00 00 04 59.40 00 05 17.30 00 05 22.00	007 23 31 * 351 39 00 023 00 00 00 00 00 00 00 00 00 00 00 00 00	58 46 53 * 12 47 00 16 36 00 55 21 57 * 13 00 00	
CAMBROG MASS CAMBROG MASS DAYTON B O CINCNATI B O VANCOUVER BC	42 22 47 N 42 22 47 N 39 50 14 N 39 09 06 N 49 15 46 N	288 52 14 288 52 14 275 44 03 275 32 15 236 44 57	24 24 249 105	00 05 47.40 00 05 57.00 00 05 58.50 00 06 07.00 01 36 23.00	317 00 00 318 00 00 009 30 30 * 007 24 00 004 34 00 *	16 00 00 17 00 00 70 36 00 # 19 36 00 46 48 00 #	
VANCOUVER BC SACMTO E CAL COLLEGE ALAS HGSHMTSYMA J SENOAI J	49 15 46 N 38 32 55 N 64 51 18 N 36 02 22 N 38 15 22 N	236 44 57 238 14 51 212 10 12 139 23 54 140 51 56	105 15 31 45	01 36 42.00 01 37 21.30 03 06 32.60 09 18 22.00 09 18 41.00	004 10 00 * 006 20 08 * 021 42 00 * 012 12 00 * 346 24 00	41 12 00 # 49 30 00 # 99 54 00 # 58 00 00 # 15 36 00	
MIZUKAIOO J HGSHMTSYMA J JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	36 00 56 N 36 02 22 N 60 48 50 N 60 48 50 N 60 48 50 N	139 59 18 139 23 54 023 30 09 023 30 09 023 30 09	12 31 103 103 103	09 18 53.00 09 19 50.00 15 19 16.30 15 19 32.60 15 19 50.40	350 00 00 011 40 00 * 300 24 00 300 18 00 300 18 00	14 30 00 64 00 00 # 10 30 00 12 30 00 13 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	15 20 04.30 15 20 19.00 15 20 33.90 15 20 51.70 15 21 07.00	300 12 00 300 06 00 299 48 00 299 36 00 299 18 00	17 06 00 19 36 00 22 42 00 26 54 00 31 12 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	15 21 18.70 15 21 28.30 15 21 37.90 15 21 47.60 15 21 55.00	298 54 00 298 30 00 298 00 00 297 24 00 296 42 00	35 06 00 38 48 00 43 00 00 47 48 00 51 48 00	
JOKNN OB FIN	60 48 50 N	023 30 09	103	15 22 03.20	295 36 00	56 42 00	

	LONGITUDE	HEIGHT	TIME GMT	AZIMUTH	ELEVATION	SLANT
STATION LATITUDE	EAST	IN METERS	HR MIN SEC	OR RGT ASCEN *	OR DECLINATION#	RANGE IN KM
		23 NOV 1958	(CONT)			
JOKNN OR FIN 60 48 50 N	023 30 09	103	15 22 10.50	294 12 00	61 36 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	15 22 18.10	292 12 00	67 06 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	15 22 25.30	288 36 00	72 30 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	15 23 03.70	138 06 00	74 42 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	15 23 10.26	134 18 00	69 48 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	15 23 16.40	131 54 00	65 30 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	15 23 23.80	130 12 00	60 36 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	15 23 33.50	128 36 00	54 60 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	15 23 45.30	127 30 00	48 18 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	15 23 55.90	126 48 00	43 30 00	
JOKNN 03 FIN 60 48 50 N	023 30 09	103	15 24 06.20	126 18 00	39 24 00	
JOKNN 03 FIN 60 48 50 N	023 30 09	103	15 24 19.50	125 48 00	34 48 00	
JOKNN 08 FIN 60 48 50 N	023 30 09	103	15 24 33.70	125 30 00	30 42 00	
JOKNN 08 FIN 60 48 50 N	023 30 09	103	15 24 49.20	125 12 00	26 48 00	
JOKNN 08 FIN 60 48 50 N	023 30 09	103	15 25 03.90	125 06 00	23 48 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	15 25 22.46	124 48 C0	20 30 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	15 25 46.90	124 42 00	16 54 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	15 26 03.50	124 36 00	14 42 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	15 26 21.00	124 30 00	12 42 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	15 26 41.40	124 30 00	10 42 00	
JOKNN OR FIN 60 48 50 N	023 30 09	103	15 26 58.50	124 24 00	09 06 00	
JOKNN OR FIN 60 48 50 N	023 30 09	103	15 27 18.60	124 24 00	07 24 00	
JOKNN OR FIN 60 48 50 N	023 30 09	103	15 27 37.70	024 24 00	05 48 00	
JOKNN OR FIN 60 48 50 N	023 30 09	103	16 54 10.40	286 06 00	11 00 00	
JOKNN OR FIN 60 48 50 N	023 30 09	103	16 54 16.40	265 12 00	11 36 00	
JOKNN OB FIN 60 48 50 N	C23 30 09	103	16 54 22.80	284 00 00	12 12 00	
JOKNN OB FIN 60 48 50 N	O23 30 09	103	16 54 33.00	282 12 00	13 12 00	
JOKNN OB FIN 60 48 50 N	G23 30 09	103	16 54 41.70	289 36 00	14 00 00	
JOKNN OB FIN 60 48 50 N	O23 30 09	103	16 54 51.30	278 30 00	15 00 00	
JOKNN OB FIN 60 48 50 N	O23 30 09	103	16 54 59.90	276 30 00	15 48 00	
GELEEN NETH 50 57 55 N JOKNN OB FIN 50 48 50 N JOKNN OB FIN 60 48 50 N JOKNN OB FIN 60 48 50 N JOKNN OB FIN 60 48 50 N	005 49 27 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103	16 55 05.70 16 55 11.40 16 55 20.10 16 55 29.10 16 55 38.10	010 59 18 # 273 48 00 271 36 00 269 00 00 266 18 00	58 30 00 * 17 00 00 17 48 00 18 48 00 19 48 00	
JOKNN 03 FIN 60 48 50 N	023 30 09	103	16 55 47.20	263 24 00	20 36 00	
JOKNN 08 FIN 60 48 50 N	023 30 09	103	16 55 57.10	260 05 00	21 30 00	
JOKNN 08 FIN 60 48 50 N	023 30 09	103	16 56 09.20	258 48 00	22 30 00	
JOKNN 08 FIN 60 48 50 N	023 30 09	103	16 56 23.40	250 12 00	23 36 00	
JOKNN 08 FIN 60 48 50 N	023 30 09	103	16 56 35.60	245 06 00	24 18 00	
JOKNN 03 FIN 60 48 50 N	023 30 09	103	16 56 52.00	238 12 00	25 00 00	
JOKNN 08 FIN 60 48 50 N	023 30 09	103	16 57 09.00	230 48 00	25 06 00	
JOKNN 08 FIN 50 48 50 N	023 30 09	103	16 57 27.20	223 96 09	24 48 00	
JOKNN 08 FIN 60 48 50 N	023 30 09	103	16 57 45.80	215 24 00	24 00 00	
JOKNN 08 FIN 60 48 50 N	023 30 09	103	16 57 56.50	211 18 00	23 18 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	16 58 10 • 10	206 30 00	22 24 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	16 58 32 • 50	199 06 00	20 30 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	16 58 49 • 90	194 18 00	18 54 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	16 59 02 • 50	191 06 00	17 42 00	
JOKNN OB FIN 60 48 50 N	023 30 09	103	16 59 18 • 50	187 36 00	16 18 00	
JOKNN OB F1N 60 48 50 N JOKNN OB F1N 60 48 50 N CINCNAT1 B 0 39 90 90 6 N DAYTON B 0 39 50 14 N CAMBROG MASS 42 22 47 N	023 30 09 023 30 09 275 32 15 275 44 03 288 52 14	103 103 249 24	16 59 38.30 16 59 58.30 23 06 42.00 23 06 59.90 23 07 08.00	183 42 00 180 18 00 028 00 00 032 16 00 352 00 00	14 30 00 12 42 00 11 18 D0 12 50 00 27 00 D0	
DAYTON B O 39 50 14 N CINCNATI B O 39 09 06 N PT WASHNG NY 40 49 48 N	275 44 03 275 32 15 286 17 24	249 24 NOV 1958	23 C7 51.00 23 O8 17.00 23 O8 19.00	004 57 00 <b>*</b> 052 18 00	40 48 00 <b>*</b> 12 24 00 31 18 00	
EDMONTON CAN 53 20 24 N OAYTON B 0 39 50 14 N DAYTON B 0 39 50 14 N ST LOUIS MO 38 33 44 N COLLEGE ALAS 64 51 18 N	246 45 00 275 44 03 275 44 03 269 34 24 212 10 12	249 249 196	00 35 02.40 00 38 59.40 00 39 03.00 00 39 37.12 02 05 33.00	010 32 18 * 015 04 00 * 328 59 00 013 11 05 * 180 00 00	69 36 00 * 48 18 00 * 12 36 00 67 13 33 *	
COLLEGE ALAS 64 51 18 N COLL C ALAS 64 51 36 N ASAH1KAWA J 43 46 27 N HGSHMTSYMA J 36 02 22 N MIL RAD MASS 42 37 03 N	212 10 12 212 12 12 142 21 50 139 23 54 288 30 28	137 113 31 155	03 39 26.50 03 39 54.00 08 17 04.00 09 52 10.00 15 40 51.00	225 00 00 020 00 00 # 003 15 00 # 015 46 00 # 329 06 00	25 42 00 92 00 00 * 34 00 00 * 52 00 00 * 14 42 00	980

		LONGITUOE	HEIGHT	7105 605			
STATION	LATITUOE	EAST	IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	NOITAVALA *NCITANILO30	SLANT RANGE IN KM
			24 NOV 1958	(CONT)			
MIL RAO MASS MIL RAO MASS MIL RAO MASS HARROGTE ENG ROYAL EONBG	42 37 03 N 42 37 03 N 42 37 03 N 53 59 00 N 55 55 30 N	288 30 28 288 30 28 288 30 28 358 26 00 356 48 59	155 155 155	15 42 36.00 15 42 46.00 15 43 55.00 17 26 00.00 17 27 22.60	002 36 00 004 42 00 014 48 00 013 22 00 * 023 31 00 *	08 00 00 07 18 00 02 54 00 55 00 00 *	1410 1458 2060
HARROGTE ENG HARROGTE ENG HARROGTE ENG HARROGTE ENG ATHENS GR	53 59 00 N 53 59 00 N 53 59 00 N 53 59 00 N 53 59 00 N 37 58 19 N	358 26 00 358 26 00 358 26 00 358 26 00 023 43 01	110	17 27 56.00 17 27 56.00 17 28 33.00 17 28 33.00 17 31 44.50	063 12 00 000 30 00 * 101 18 00 000 48 00 * 317 30 00	66 48 00 58 00 00 # 50 36 00 33 30 00 * 22 06 00	
BELCHER CAN BELCHER CAN BELCHER CAN BELCHER CAN BELCHER CAN	57 56 12 N 57 56 12 N 57 56 12 N 57 56 12 N 57 56 12 N	265 49 33 265 49 33 265 49 33 265 49 33 265 49 33		23 33 40 •80 23 33 48 •40 23 33 58 •70 23 33 59 • 00 23 34 06 •70	271 24 00 259 00 00 238 12 00 019 57 00 * 218 06 00	63 12 00 67 30 00 71 00 00 55 05 00 * 71 36 00	
OOAY CAN BELCHER CAN OUNLAP ONTAR OUNLAP ONTAR N CANTON B O	57 34 57 N 57 56 12 N 43 51 46 N 43 51 46 N 41 04 50 N	265 47 35 265 49 33 280 34 40 280 34 40 278 26 02	744 744	23 34 10.00 23 34 15.80 23 37 11.00 23 37 36.00 23 37 39.00	020 40 00 * 196 00 00 016 01 12 * 017 30 00 * 010 26 00 *	25 CO CO * 69 42 CO * 68 42 CO * 70 CO CO * 83 CO CO *	
OUNLAP ONTAR OUNLAP ONTAR OUNLAP ONTAR WLMGTN P OEL N CANTON B O	43 51 46 N 43 51 46 N 43 51 46 N 39 46 25 N 41 04 50 N	280 34 40 280 34 40 280 34 40 284 25 33 278 26 02	244 244 244 84	23 37 43.00 23 38 18.00 23 39 08.00 23 39 12.40 23 39 30.00	018 50 00 * 921 20 00 * 990 08 00 * 920 34 12 * 992 05 00 *	74 OC OO * 65 OO OO * 28 48 OO * 69 24 ^ ^ * 38 OO OO *	
WASHGTN A OC MIL RAD MASS	38 45 30 N 42 37 03 N	282 47 30 288 30 28	69 155	23 39 54.00 23 45 27.00	040 00 00 161 36 00	53 00 00 02 30 00	
			25 NOV 1958		131 30 00		2485
NEWBROOK CAN ATHABASC CAN PORTLAND ORE PORTLAND ORE ALMGROO A NM	54 19 26 N 54 26 24 N 45 29 19 N 45 29 19 N 32 52 23 N	247 02 44 1 246 51 00 237 22 27 237 22 27 254 02 57	672 46 46 1335	01 06 53.00 01 07 02.00 01 07 19.60 01 08 27.60 01 10 21.00	020 58 42 * 021 46 54 * 004 58 00 * 003 48 00 * 007 38 30 *	51 42 00 * 44 19 00 * 48 07 00 * 67 42 00 *	
ALBUO-GS NM ALMGROD A NM TUCSON ARIZ ALBUO A NM VANCOUVER BC	35 06 22 N 32 52 23 N 32 13 59 N 35 05 03 N 49 15 46 N	253 23 14 254 02 57 249 03 51 253 21 24 236 44 57	1565 1335 227 1520 105	01 11 10.00 01 11 20.00 01 11 30.00 01 11 31.00 02 40 26.00	004 56 00 * 005 34 42 * 045 00 00 004 25 00 * 018 45 48 *	56 06 00 * 59 12 00 * 15 00 00 4 9 00 00 * 31 30 00 *	
VANCOUVER BC SENOAI J SAPPORO J SENDAI J ASAHIKAWA J	49 15 46 N 38 15 22 N 43 04 49 N 38 15 22 N 43 46 27 N	236 44 57 140 51 56 141 22 13 140 51 56 142 21 50	105 45 20 45 113	02 40 44.00 03 46 56.00 03 47 27.00 08 48 10.00 03 48 24.00	019 26 42 * 345 12 00 015 25 00 * 357 42 00 021 12 00 *	26 48 00 * 15 30 00 72 00 00 * 27 00 00 * 63 00 00 *	
MATSUE J SAPPORO J ASAHIKAWA J KONKO J KONKO J	35 27 42 N 43 04 49 N 43 46 27 N 34 32 31 N 34 32 31 N	133 03 18 141 22 13 142 21 50 133 37 40 133 37 40	20 113 4	08 48 33.00 09 48 43.00 08 49 17.00 08 49 31.00 08 49 31.00	004 27 00 * 023 41 00 * 023 33 00 * 004 47 00 * 045 42 00	42 00 00 % 60 00 00 % 29 00 00 % 45 00 00 % 16 30 00	
KANAZAWA J SENOAI J KANYAMACHI J TAKAOA J SUWA J	36 32 45 N 38 15 22 N 34 03 46 N 37 06 38 N 36 00 13 N	136 41 01 140 51 56 135 15 10 138 15 22 138 07 43	80 45 40 2 <b>3</b> 762	08 49 32 00 08 49 34 00 08 49 44 00 08 49 45 00 08 50 08 00	004 20 00 * 037 24 00 004 44 00 * 003 55 00 * 003 48 00 *	48 00 00 <b>*</b> 44 12 00 47 00 00 <b>*</b> 48 00 00 <b>*</b> 43 00 00 <b>*</b>	
YOKKAICHI J YAMAGATA J OTARU J MATSUE J MIL RAO MASS	35 00 15 N 38 15 16 N 43 11 27 N 35 27 42 N 42 37 03 N	136 39 00 140 20 59 141 00 23 133 03 18 288 30 28	3 151 10 1 155	08 50 30.00 08 50 33.00 08 51 26.00 09 52 17.00 16 09 47.00	004 19 00 * 008 30 00 121 30 00 00 * 338 00 00	49 00 00 * 30 30 00 28 30 00 72 00 00 * 04 54 00	1626
MIL RAO MASS MIL RAD MASS NIINSALO FIN NIINSALO FIN NIINSALO FIN	42 37 03 N 42 37 03 N 61 51 20 N 61 51 20 N 61 51 20 N	288 30 28 288 30 28 022 18 10 022 18 10 022 18 10	155 155 133 133 133	16 10 31.80 16 11 35.40 16 21 31.40 16 21 59.40 16 22 32.40	353 22 12 005 03 24 255 09 00 243 31 48 230 44 24	03 13 48 00 45 36 20 10 48 18 15 36 17 42 00	1626 1810 2081
NIINSALO FIN NIINSALO FIN NIINSALO FIN ROYAL EONAG ROYAL EDNBG	61 51 20 N 61 51 20 N 61 51 20 N 55 55 30 N 55 55 30 N	022 18 10 022 18 10 022 18 10 022 18 10 356 48 59 356 48 59	133 133 133 146 146	16 22 56.40 16 24 23.40 16 25 30.40 17 54 43.00 17 54 53.00	218 06 00 192 09 48 179 25 12 239 06 00 019 30 00 *	16 42 00 15 44 24 12 06 36 51 30 00	
ONSK-A:N.IRE	52 23 13 N	353 39 43	86	17 55 11:00	246 48 00	28 00 00 * 80 48 00	

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STATION	LATITUOE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLAN' RANG IN K
			25 NOV 1958	(CONT)			
ONSK-A+N•IRE CCNAV FLA CCNAV FLA CCNAV FLA CCNAV FLA	52 23 13 N 28 29 32 N 28 29 32 N 28 29 32 N 28 29 32 N	353 39 43 279 39 24 279 39 24 279 39 24 279 39 24	86	17 55 11.00 19 06 44.00 19 07 34.00 19 08 01.00 19 08 06.00	020 55 00 # 344 39 00 351 20 24 352 54 00 352 58 48	49 00 00 # 23 49 12 36 42 36 09 39 36 38 14 24	
CAMBROG MASS CAMBROG MASS CAMBROG MASS WLMGTN P OEL PT WASHNG NY	42 22 47 N 42 72 47 N 42 22 47 N 39 46 25 N 40 49 48 N	269 52 14 288 52 14 288 52 14 284 25 33 286 17 24	24 24 24 84	22 28 38 90 22 29 04 40 22 32 08 30 22 32 35 70 22 33 57 00	334 CO 00 340 42 00 926 42 00 004 10 48 *	10 18 00 12 00 00 42 24 00 45 54 00 # 25 18 00	
ARLINGTON VA	38 50 48 N 42 22 47 N	282 53 35 288 52 14	59 24	22 34 09.00 22 35 38.00	049 84 00 122 48 00	17 55 00 15 48 00	
Carrie and			 26 NOV 1958			2. 40 00	
MANH P D KAN YANKTON SD MANH P D KAN CAMBROG MASS CAMBROG MASS	39 11 18 N 42 52 42 N 39 11 18 N 42 22 47 N 42 72 47 N	263 24 00 262 36 34 263 24 00 288 52 14 288 52 14	347 379 347 24 24	00 02 25.40 00 03 39.00 00 04 11.60 00 05 26.00 00 06 38.00	009 02 51 * 003 16 00 * 016 02 00 266 00 00 245 00 00	67 18 36 * 50 00 00 * 21 03 30 17 00 00 17 30 00	
S PTRSBG FLA MANH P D KAN MADISON WIS PORTLAND ORE ATHABASC CAN	27 46 40 N 39 11 18 N 43 03 57 N 45 29 19 N 54 26 24 N	277 15 00 263 24 00 270 33 39 237 22 27 246 51 00	15 347 317 46	00 07 03.00 00 07 06.80 00 26 00.00 01 32 11.30 01 32 12.00	000 00 00 104 39 00 270 00 00 011 01 00 * (17 50 12 *	24 42 00 42 53 00 34 60 00 64 00 00 # 21 30 00 #	
EDMONTON CAN EDMONTON CAN SPOKN A WASH VANCOUVER BC VANCOUVER BC	53 20 24 N 53 20 24 N 47 37 37 N 49 15 46 N 49 15 46 N	246 45 00 246 45 00 242 39 59 236 44 57 236 44 57	706 105 105	01 32 14 20 01 32 49 70 01 33 15 00 01 33 24 00 01 33 32 00	017 12 06 * 018 15 36 * 015 45 00 * 001 25 06 * 001 23 30 *	24 12 00 # 19 24 00 # 79 00 00 # 63 54 00 # 56 12 00 #	
SPOKN A WASH EL PASO TEX ALBUG A NM ALBUG A NM ALBUG-GS NM	47 37 37 N 31 49 41 N 35 05 03 N 35 06 22 N	242 38 59 253 36 36 253 21 24 253 21 24 253 23 14	706 1520 1520 1565	01 35 20.00 01 37 39.00 01 36 14.00 01 36 72.00 01 38 59.00	000 10 00 * 013 00 00 022 53 00 * 023 28 00 * 000 10 00 *	15 00 00 * 52 30 00 * 51 36 00 * 39 30 00 * 19 36 00 *	
N CANTON A O Yamagata J Yamagata J Sendai J Takaoa J	40 55 54 N 38 15 16 N 38 15 16 N 38 15 22 N 37 06 38 N	278 32 40 140 20 59 140 20 59 140 51 56 138 15 22	366 151 151 45 23	C2 25 42.35 09 12 36.00 09 12 37.00 09 13 06.00 09 13 29.00	003 25 48 * 313 00 00 310 30 00 310 12 00 016 52 00 *	49 30 06 # 23 30 00 31 30 00 25 12 00 62 00 00 #	
L AMYSTMHSDM L IAKSAYIM L OROPGAS L IAGNAS L AGAAAT	36 02 22 N 31 55 23 N 43 04 49 N 38 15 22 N 37 06 38 N	139 23 54 131 25 24 141 22 13 140 51 56 138 15 22	31 22 45 23	09 13 42.00 09 13 55.00 09 14 01.00 09 14 06.00 09 14 14.00	017 40 00 * 006 53 00 * 019 53 00 * 294 24 00 019 22 00 *	55 00 00 # 71 00 00 # 08 00 00 # 40 54 00 60 00 00 #	•
TAKADA J HIMEJI J YAMAGATA J SENOAI J OTARU J	37 06 38 N 34 50 25 M 38 15 16 N 38 15 22 N 43 11 27 N	138 15 22 134 41 24 140 20 59 140 51 56 141 00 23	23 25 151 45 10	05 14 31.00 09 14 35.00 09 14 43.00 09 14 48.00 09 14 55.00	020 23 00 * 018 00 00 270 00 00 264 36 00 270 00 00	55 00 00 \$45 30 00 \$56 00 00 53 30 00 34 30 00	•
TAKAOA J HGSHMTSYMA J KANYAMACHI J MIZUKAIOO J MATSUE J	37 06 38 N 36 02 22 N 34 03 46 N 36 00 56 N 35 27 42 N	138 15 22 139 23 54 135 15 10 139 59 18 133 03 18	23 31 40 12 1	09 14 56.00 09 15 02.00 09 15 07.00 09 15 07.00 09 15 09.00	021 48 00 # 020 48 00 # 001 41 00 # 020 35 00 # 002 00 00 #	47 00 00 4 62 00 00 4 43 00 00 4	t t
SUWA J YOKKAICHI J KAGOSHIMA J MIYAZAKI J MIZUKAIDO J	36 00 13 N 35 00 15 N 31 31 34 N 31 55 23 N 36 00 56 N	138 07 43 136 39 00 130 31 47 131 25 24 139 59 18	762 3 13 8 12	09 15 10.00 09 15 11.60 09 15 13.00 09 15 19.00 09 15 27.00	020 27 00 * 023 46 00 * 003 51 00 * 003 43 00 * 270 00 00	55 00 00 46 00 00 ·	¥
TAKAOA J KONKO J HGSHMTSYMA J HIROSHIMA J KAGOSHIMA J	37 06 38 N 34 32 31 N 36 02 22 N 34 22 08 N 31 31 34 N		31 3	09 15 42.00 09 15 53.00 09 15 57.00 09 15 57.00 09 16 32.00	023 12 00 1 002 10 00 1 022 53 00 1 002 45 00 1	23 00 00 63 00 00 726 00 00	* * *
KYOTO U J YATSUSHIRO J MIYAZAKI J KAGOSHIMA J KAGOSHIMA J	35 01 39 N 32 30 21 N 31 55 23 N 31 31 34 N 31 31 34 N	130 36 15 131 25 24 130 31 47	3 . 8 13	09 16 32.00 09 16 39.00 09 17 00.00 10 47 20.00 10 48 34.00	090 00 00 002 54 00 018 05 00	23 00 00 # 02 00 00 # 20 00 00	*
FT BELVE VA	38 45 30 N	282 48 42	85	10 54 05.00	000 00 00	37 00 00	

STATION	LATITUDE	LONGITUDE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			26 NOV 1958	(CONT)			
OAKLAND CAL MIL RAD MASS NIINSALO FIN NIINSALO FIN NIINSALO FIN	37 47 00 N 42 37 03 K 61 51 20 N 61 51 20 N 61 51 20 N	237 48 00 288 30 28 022 18 10 022 18 10 022 18 10	30 155 133 133 133	13 58 31.00 15 02 11.00 15 13 23.20 15 13 41.20 15 13 43.20	001 30 00 * 016 36 00 241 18 00 216 12 00 174 57 00	38 00 00 * 02 30 00 41 22 48 33 23 24 32 58 48	1843
NIINSALO FIN NIINSALO FIN JOKNN OB FIN NIINSALO FIN JOKNN OB FIN	61 51 20 N 61 51 20 N 60 48 50 N 61 51 20 N 50 48 50 N	022 18 10 022 18 10 023 30 09 022 18 10 023 30 09	133 133 103 133 103	15 14 27.20 15 13 15.20 15 16 34.30 15 16 35.20 15 16 41.90	164 07 12 155 00 36 147 36 00 152 27 00 147 06 00	25 13 48 17 07 12 10 30 00 14 31 48 09 54 00	
JOKNN OB FIN ON INSALO FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 61 51 20 N 60 48 50 N 60 48 50 N 60 48 50 N	023 30 09 022 18 10 023 30 09 023 30 09 023 30 09	103 133 103 103 103	15 16 48 • 10 15 16 55 • 20 15 16 55 • 30 15 17 03 • 20 15 17 12 • 50	146 42 00 151 17 24 146 18 00 145 54 00 145 24 00	09 18 00 13 21 36 03 42 00 08 00 00 07 12 00	
JOKNN OB FIN NIINSALO FIN JOKNN OB FIN JOKNN OB FIN NIINSALO FIN	60 48 50 N 61 51 20 N 60 48 50 N 60 48 50 N 61 51 20 N	023 30 09 022 18 10 023 30 09 023 30 09 022 18 10	103 133 103 103 133	15 17 21.00 15 17 21.20 15 17 29.80 15 17 38.20 15 17 42.30	145 00 00 148 33 00 144 36 00 144 18 00 146 45 36	06 30 00 09 38 24 05 54 00 05 12 00 07 51 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN NIINSALO FIN ROYAL EDNBG	60 48 50 N 60 48 50 N 60 48 50 N 61 51 20 N 55 55 30 N	023 30 09 023 30 09 023 30 09 022 18 10 356 48 59	103 103 103 133 146	15 17 46.73 15 17 55.20 15 18 01.60 15 18 10.20 16 44 31.05	144 00 00 143 42 00 143 24 00 145 33 36 000 42 00	04 36 00 04 00 00 03 42 00 06 38 24 61 36 00	
DONREAY SCOT JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	58 36 00 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	356 15 CO 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103	16 44 34.50 16 45 39.00 16 45 43.60 16 45 57.60 16 46 06.40	021 40 00 # 251 54 00 249 12 00 246 42 00 244 12 00	45 00 00 * 11 42 00 11 48 00 11 54 00 12 00 00	
JOKAN OB FIN JOKAN OB FIN JOKAN OB FIN JOKAN OB FIN COPNGN B DEN	50 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 55 42 13 N	023 30 09 023 30 09 023 30 09 023 30 09 012 27 09	103 103 103 103 10	16 45 16 40 16 46 76 32 15 46 34 60 16 46 42 70 16 46 43 00	241 24 00 238 42 00 236 00 00 233 42 00 119 40 00 #	12 06 00 12 06 00 12 06 00 12 00 00 12 00 00 11 15 00 **	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N	073 20 09 073 30 09 073 30 09 073 30 09 073 30 09	103 103 103 103 103	16 46 52.99 16 47 00.70 16 47 11.00 16 47 19.60 16 47 29.90	230 54 00 228 48 00 226 00 00 223 42 00 221 24 00	11 48 00 11 36 00 11 24 00 11 12 00 10 54 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN	60 48 50 N 60 48 50 N 60 46 50 N 60 48 50 N	023 30 09 023 30 09 023 30 09 023 30 09 023 30 09	103 103 103 103 103	15 47 38 • 50 16 47 47 • 70 16 47 57 • 70 16 48 07 • 40 16 48 15 • 30	219 00 00 215 48 00 214 30 00 212 24 00 210 42 00	10 30 00 10 06 00 09 42 00 09 16 00 09 00 00	
JOKNN OB FIN JOKNN OB FIN JOKNN OB FIN FOW AFP CAL	60 48 50 N 60 48 50 N 60 48 50 N 60 48 50 N 34 53 09 N	023 30 09 023 30 09 023 30 09 023 30 09 242 00 27	103 103 103 103 793	16 48 25.60 16 48 33.70 16 48 43.40 16 48 51.60 17 59 35.00	208 36 00 201 00 00 205 06 00 203 36 00 307 00 00	08 24 00 08 00 00 07 30 00 07 06 00 13 00 00	
LDNDERY,N.IR S FERNNOO SP MIL RAD MASS MIL RAD MASS MIL RAD MASS	55 00 00 N 36 27 42 N 42 37 03 N 42 37 03 N 42 37 03 N	352 39 50 353 47 42 288 30 28 288 30 28 288 30 28	30 155 155 155	18 18 05.00 18 22 30.44 21 20 13.00 21 21 41.00 21 23 20.00	237 00 00 002 02 18 * 025 18 00 053 06 00 079 06 00	31 00 00 48 33 00 * 13 06 00 14 12 00 13 00 00	1420 1387 1645
N CANTON B O MIL RAD MASS OAYTON B O ST COLL PA MIL RAD MASS	41 04 50 N 42 37 03 N 39 50 14 N 40 44 01 N 42 37 03 N	278 26 92 288 30 28 275 44 03 282 06 33 288 30 28	155 249 393 155	22 52 03.00 22 52 10.10 22 53 09.20 22 53 52.00 22 53 53.00	319 36 00 018 03 00 000 00 00 308 24 00	65 00 00 # 13 00 00 21 15 00 35 00 00 33 12 00	1432
DAYTON B O N CANTON B O DAYTON B O WASH WLSN DC MIL RAD MASS	39 50 14 N 41 04 50 N 39 50 14 N 38 50 00 N 42 37 03 N	275 44 03 278 26 02 275 44 03 282 59 24 288 30 26	249 249 155	22 53 56.00 22 54 23.50 22 55 03.20 22 55 09.00 22 55 22.00	036 54 00 003 25 48 * 067 52 00 002 11 00 * 235 36 00	25 00 <b>0</b> 0	
ST COLL PA DAYTON B O ARLINGTON VA SSLVDR C BWI SSLVDR C BWI	40 44 01 N 39 50 14 N 38 50 48 N 24 03 59 N 24 03 59 N	282 06 33 275 44 03 282 53 35 285 27 49 285 27 49	393. 249 59 15 15	22 55 37 000 22 56 07 600 22 56 09 50 22 56 47 000 22 56 50 00	090 00 00 090 56 00 095 00 00 014 36 36 015 26 06	47 80 00 19 15 00 45 30 00 11 48 00 12 12 36	

STATION	LATITUOE	LONGITUDE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			26 NOV 1958	(CONT)			
SSLVOR C BW! MIL RAD MASS SSLVOR C BW! SSLVOR C BW! DAYTON B 0	24 03 59 N 42 37 03 N 24 03 59 N 24 03 59 N 39 50 14 N	285 27 49 268 30 28 285 27 49 285 27 49 275 44 03	15 155 15 15 249	22 56 53 • CO 22 56 54 • OO 22 56 56 • OO 22 56 59 • OO 22 57 OO • OO	C16 C3 36 170 06 00 016 54 36 017 49 30 102 55 00	12 29 24 31 18 00 12 39 36 12 48 36 13 48 00	876
SSLVDR C BWI SSLVDR C RWI DAYTON B O MIL RAD MASS	24 03 59 N 24 03 59 N 39 50 14 N 42 37 03 N	285 27 49 285 27 49 275 44 03 288 30 28	15 15 249 155	22 57 02:00 22 57 05:00 22 57 48:40 22 58 28:00	018 44 24 026 25 12 110 28 00 160 48 00	14 02 42 14 33 36 09 18 00 14 00 00	1454
			27 NOV 1958				
FT WTH A TEX EDMONTON CAN ATHABASC CAN AMES A IOWA AMES IOWA	32 42 27 N 53 70 74 N 54 26 24 N 42 01 59 N 42 01 43 N	262 38 14 246 45 00 246 51 00 266 22 00 266 20 59	182	00 21 11.00 00 21 52.10 00 21 55.50 00 23 52.60 00 24 11.20	003 20 00 # 021 10 24 # 021 49 42 # 318 00 00 015 16 15 #	51 00 00 # 64 00 00 # 57 30 00 # 14 30 00 45 40 39 #	
AMES A IOWA AMES IOWA AMES IOWA AMES IOWA DENVR A COLO	42 01 59 N 42 01 43 N 42 01 43 N 42 01 43 N 39 44 52 N	266 22 00 266 20 59 266 20 59 266 20 59 255 03 24	305 1625	00 24 55.70 00 25 07.00 00 25 23.00 00 26 00.00 00 26 03.00	311 00 00 015 34 49 # 017 07 49 # 018 41 02 # 055 30 00	27 00 00 47 13 07 # 46 34 28 # 41 12 00 # 32 00 00	
AMES IOWA OAYTON B O AMES IOWA AMES A IOWA OAYTON B O	42 01 43 V 39 50 14 N 42 01 43 N 42 01 59 N 39 50 14 N	266 20 59 275 44 03 266 20 59 266 22 00 275 44 03	249 305 249	00 26 07.00 00 26 07.80 00 26 11.00 00 26 18.30 00 26 41.40	019 02 38 * 014 15 00 * 019 11 32 * 273 00 00 279 32 00	3F 58 54 * 22 00 00 * 37 55 40 * 54 12 00 19 30 00	
AMES A IOWA MANHATTN KAN MANHTN A KAN OAYTON B O AMES A IOWA	42 01 59 N 39 09 45 N 39 15 58 N 39 50 14 N 42 01 59 N	266 22 00 263 31 09 263 22 38 275 44 03 266 22 00	305 311 408 249 305	00 26 53.60 00 27 07.10 00 27 07.10 00 27 44.20 00 27 47.90	226 00 00 023 30 54 * 023 30 54 * 250 34 00 183 00 00	59 00 00 42 00 49 * 42 49 12 * 24 35 00 41 00 00	
DAYTON B O FT WTH C TEX ST LOUIS MO ST LOUIS MO DAYTON B O	39 50 14 N 32 42 15 N 38 39 46 N 38 37 59 N 39 50 14 N	275 44 03 262 37 30 269 37 35 269 48 09 275 44 03	249 204 191 152 249	00 23 00 60 00 28 11 00 00 28 15 50 00 28 20 00 00 28 20 60	019 20 00 * 603 20 00 * 018 34 00 * 018 43 40 * 236 00 00	01 54 00 * 51 00 00 * 38 48 00 * 37 33 00 * 24 49 00	
AMES A IOWA DAYTON B O ST LOUIS MO AMES A IOWA WASH WLSN OC	42 01 59 N 39 50 14 N 38 39 46 N 42 01 59 N 38 50 00 N	266 27 00 275 44 03 269 32 35 266 22 00 282 59 24	305 249 191 305	00 25 42.80 00 28 55.10 00 29 01.00 00 29 19.30 00 29 23.00	170 00 00 020 32 00 * 022 24 04 * 165 00 00 019 04 00 *	- 13 24 38 * 13 00 00	
AMES A 10WA WASH WLSN DC WASH WLSN DC LAPLAT C ARG LAPLAT C ARG	42 01 59 N 38 50 00 N 38 50 00 N 34 54 26 5 34 54 26 5	266 22 00 262 59 24 282 59 24 302 05 30 302 05 30	305	00 79 56.80 00 30 39.01 00 32 19.00 00 49 54.50 00 50 11.70	163 00 00 020 08 00 # 022 20 00 # 001 14 54 # 003 16 58 #	42 00 00 + - 69 06 00 +	• •
SJUAN-GS ARG COLLEGE ALAS LAPLAT C ARG LAPLAT C ARG DOM AS BR CO	31 30 37 5 64 51 18 N 34 54 26 5 34 54 26 5 48 31 15 N	291 22 46 212 10 12 302 05 30 302 05 30 236 34 57	. 229	00 50 35.00 01 50 52.30 00 51 06.00 00 52 02.10 01 54 28.80	007 41 00 # 180 00 00 00 00 00 17 4 010 01 10 4 016 21 42 #	36 36 00 - 70 28 54 6 - 60 16 18 6	
PORTLANO ORE VANCOUVER BC PORTLANO ORE OOM AS BR CO VANCOUVER BC	45 29 19 N 49 15 46 N 45 29 19 N 48 31 15 N 49 15 46 N	237 22 27 236 44 57 237 22 27 236 34 57 236 44 57	46 229	01 54 55.40 01 55 C7.00 01 55 10.00 01 55 18.60 01 55 26.00	014 04 00 * 018 42 00 * 016 03 00 * 018 58 48 * 019 36 18 *	38 30 00 - 58 30 00 - 42 48 00 -	
OOM AS BR CO DOM AS BR CO SACMTO E CAL SACMTO E CAL WLNTCK A CAL	48 31 15 N 48 31 15 N 38 32 55 N 38 32 55 N 37 55 30 N	236 34 57 236 34 57 238 14 51 238 14 51 237 55 30	229 15 <b>1</b> 5	01 55 36.80 01 56 22.80 01 56 25.90 01 57 07.40 01 57 15.00	020 01 18 6 021 54 30 6 012 54 53 6 003 04 00 6 024 02 00 6	11 48 00 75 44 00 89 05 00	* *
STFD RES CAL SACHTO E CAL EDW AF D CAL EOW AF D CAL EDW AF D CAL	37 24 11 N 38 32 55 N 34 56 43 N 34 56 43 N 34 56 43 N	242 04 58 242 04 58	785 785	01 58 38.00 01 58 43.10 01 59 22.40 01 59 28.40 01 59 34.40	056 30 00 031 15 12 077 19 48 092 14 24 104 21 36	# 00 00 70 04 00 63 41 48 50 59 06 57 25 12	665
SACMTO E CAL EDW AF D CAL EOW AF D CAL EDW AF O CAL EDW AF D CAL	34 56 43 N 34 56 43 N	242 04 58 242 04 58 242 04 58	785 785 785	01 59 40.80 02 00 04.42 02 00 10.40 02 00 16.40 02 00 22.40	001 19 41 111 24 00 117 24 00 122 11 24 126 03 36	* - 00 44 00 52 40 48 48 18 00 44 10 48 40 24 36	

STATION	LATITUDE	LONGITUOE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH . OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			27 NOV 1958	(CONT)			
EDW AF O CAL EDW AF D CAL EDW AF O CAL WLNTCK 8 CAL COLLEGE ALAS	34 56 43 N 34 56 43 N 34 56 43 N 37 57 52 N 64 51 18 N	242 04 58 242 04 58 242 04 58 237 56 14 212 10 12	785 785 785 9	02 00 28.40 02 00 34.40 02 10 01.10 02 28 30.80 03 24 26.70	128 07 12 131 13 48 132 13 12 009 35 00 * 209 00 00	36 48 54 34 19 48 33 59 24 69 45 00 #	
COLLEGE ALAS PORTLANO ORE ASAHIKAWA J ASAHIKAWA J MITAKA J	64 51 18 N 45 29 19 N 43 46 27 N 43 46 27 M 35 40 20 N	212 10 12 237 22 27 142 21 50 142 21 50 139 32 30	46 113 113 50	03 24 50.00 03 28 32.40 03 00 39.00 08 01 43.00 08 01 46.30	020 19 50 * 018 53 00 * 023 37 00 * 033 00 00	- 12 00 00 * - 96 00 00 * - 77 90 00 * - 31 99 90 * - 21 09 00	
MITAKA J SENDAI J MITAKA J MITAKA J	35 40 20 N 35 40 20 N 38 15 22 N 35 40 20 N 35 40 20 N	139 32 30 139 32 30 140 51 56 139 32 30 139 32 30	50 45 50 50	08 02 20.20 08 02 47.20 08 02 58.00 08 03 06.00 08 03 44.50	046 42 00 057 18 00 002 42 00 # 064 54 00 079 06 00	21 30 00 21 48 00 26 00 00 # 21 24 00 19 42 00	5
MIZUKAIDO J MITAKA J HIROSHIMA J SENDAI J YOKKAICHI J	36 00 56 N 35 40 20 N 34 22 C8 N 38 15 22 N 35 00 15 N	139 59 18 139 32 30 132 28 10 140 51 56 136 39 00	12 50 3 45 3	08 04 13.00 08 04 15.30 09 35 30.00 09 35 42.00 09 36 06.00	090 00 00 088 36 00 020 37 00 * 247 36 00 019 43 00 *	17 00 00 17 00 00 32 00 00 # 19 24 00 07.00 00 #	
KANYAMACHI J MIYAZAKI J SENDAI J YATSUSHIRO J KAGOSHIMA J	34 03 46 N 31 55 23 N 38 15 22 N 32 30 21 N 31 31 34 N	135 15 10 131 25 24 140 51 56 130 36 15 130 31 47	40 8 45 3 13	09 37 11.00 00 37 12.00 09 37 22.00 09 37 35.00 09 38 00.00	921 40 90 # 923 50 00 # 214 54 90 147 00 00 009 43 00 #	- 16 00 00 # - 01 00 00 # 15 18 00 37 00 00 #	
ADLAIO A AUS ADLAIO A AUS ADLAID A AUS ADLAIO A AUS ADLAID A AUS	34 55 14 S 34 55 14 S 34 55 14 S 34 55 14 S 34 55 14 S	138 36 14 138 36 14 138 36 14 138 36 14 138 36 14	55 55 55 55	11 27 24.50 11 28 37.00 11 29 01.00 11 29 03.00 11 29 30.50	140 00 00 # 149 30 00 # 009 03 00 #	19 00 00 - 62 00 00 # 21 30 00 - 60 00 00 # - 57 00 00 #	
ADLAID A AUS ADLAIO A AUS DONREAY SCOT HARROGTE ENG STED RES CAL	34 55 14 5 34 55 14 5 58 36 00 N 53 59 00 N 37 24 11 N	138 36 14 138 36 14 356 15 00 358 26 00 237 49 20	55 55	11 29 35.00 11 29 54.00 17 03 45.00 17 04 07.00 18 19 03.00	150 00 00 009 17 00 * 019 25 00 * 018 35 00 * 314 30 00	14 30 00 - 53 00 00 # 21 00 00 # 42 00 00 #	1550
CPTWN A S AF PT WASHNG NY DAYTON B O TOWNSVW CAN DAYTON 8 C	33 56 00 5 40 49 48 N 39 50 14 N 43 45 00 N 39 50 14 N	018 28 37 286 17 24 275 44 03 280 32 00 275 44 03	7 249 249	19 61 02.00 21 46 27.40 23 10 24.40 23 10 47.00 23 11 01.30	040 00 00 006 00 00 332 05 00 016 40 00 # 342 26 00	38 00 00 36 06 00 19 45 00 40 00 00 # 28 02 00	
DUNLAP ONTAP TOWNSVW CAN DAYTON B O MLWKEE A WIS TOWNSVW CAN	43 51 46 N 43 45 00 N 39 50 14 N 42 58 07 N 43 45 00 N	280 34 40 280 32 60 275 44 09 271 51 05 280 32 60	244 249 294	23 11 12.00 23 11 18.00 23 11 21.00 23 11 27.00 23 11 30.00	017 19 00 # 017 30 00 # 014 19 00 # 001 05 00 018 00 00 #	37 24 00 # 37 36 00 # 76 54 00 # 60 20 00 35 36 00 #	
DAYTON B O WASH WLSN DC TOWNSVW CAN ARLINGTON VA MLWKEE A WIS	39 50 14 N 38 50 00 N 43 45 00 N 38 50 48 N 42 58 07 N	275 44 51 282 59 24 280 32 00 282 53 35 271 51 05	59 294	23 11 40.00 23 11 46.00 23 11 56.00 23 12 00.00 23 12 03.50	351 43 0C 016 36 00 # 019 18 00 # 018 45 00 # 001 34 00 #	40 36 00 46 00 00 # 24 36 00 # 39 30 00 # 39 00 00 #	
BUFFALO NY N CANTON O O DUNLAP ONTAR OAYTON B O N CANTON D O	42 58 00 N 40 57 46 N 43 51 46 N 39 50 14 N 40 57 46 N	281 24 00 278 40 01 280 34 40 275 44 03 278 40 01	229 360 244 249 360	23 12 04.00 23 12 08.60 23 12 13.20 23 12 21.20 23 12 22.00	270 00 00 019 20 30 # 019 47 00 # 019 40 00 020 12 00 #	44 33 30 56 36 00 * 18 12 00 * 58 55 00 51 20 00 *	
WASH WLSN OC ST COLL PA BRISTOL TENN TOWNSVW CAN WASH WLSN DC	38 50 00 N 40 44 01 N 36 35 03 N 43 45 00 N 38 50 00 N	282 59 24 282 06 33 277 50 31 280 32 00 282 59 24	393 527	23 12 37.00 23 12 42.00 23 12 45.00 23 13 06.00 23 13 09.00	017 20 00 * 270 00 00 000 00 00 021 38 00 * 018 40 00 *	44 24 00 # 51 00 00 41 00 00 - 05 00 00 # 39 12 00 #	e.
WLMGTN P DEL CAMBROG MASS WASH WLSN DC U.S.NAV 8.0C U.S.NAV 8.0C	39 46 25 N 42 22 47 N 38 50 00 N 38 55 12 N 38 55 12 N	284 25 23 288 52 14 282 59 24 282 56 08 282 56 08	94 24 93 93	23 13 20.60 23 13 32.00 23 14 08.00 23 14 10.01 23 14 11.37	C19 18 30 * 241 00 00 020 36 00 * 021 24 37 * 021 26 57 *	19 12 00 # 24 00 00 12 24 00 # 04 05 39 # 03 23 32 #	
U.S.NAV B.OC U.S.NAV B.DC WTFLD P MASS WASH WLSN DC ST COLL PA	38 55 12 N 38 55 12 N 42 07 06 N 38 50 00 N 40 44 01 N	282 56 08 282 56 09 287 11 29 282 59 24 282 06 23	93 93 85 393	23 14 12.72 23 14 14.11 23 14 16.00 23 14 28.00 23 14 36.00	021 29 14 * 021 31 35 * 020 25 36 * 022 55 00 * 180 00 00	01 42 08 * D1 59 40 * T14 42 00 * T14 42 00 * T14 42 00 * T14 42 00 * T14 18 00 * T14 18 18 18 18 18 18 18 18 18 18 18 18 18	

		1.00617005	HEIGHT	TIME GMT	4.7.7.40.1914	51.524.5400	
STATION	LATITUOE	LONGITUOE EAST	IN METERS	IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KN
•			27 NOV 1958	(CONT.)			
CAMBROG MASS CAMBROG MASS WASH WLSN OC WASH WLSN OC CURACAO NWI	42 22 47 N 42 22 47 N 38 50 00 N 38 50 00 N 12 09 04 N	288 52 14 288 52 14 282 59 24 282 59 24 291 03 28	24 24	23 14 40.00 23 15 32.00 23 16 18.00 23 18 38.00 23 21 33.00	215 GO CO 200 GO OC COO 10 GC * OO1 50 OO *	21 00 00 14 00 00 - 34 00 00 * - 45 00 00 * 70 00 00	
			28 NOV 1958				
NEWBROOK CAN ALMGDO-GS:NM L CRUC A NM SJUAN-GS ARG STIAGO R CHI	54 19 26 N 32 52 22 N 32 19 42 N 31 30 37 S 33 33 42 S	247 02 44 254 03 05 253 09 10 291 22 46 289 18 48	672 1339 1186 650 573	00 38 43.40 00 44 07.00 00 45 25.00 01 03 36.00 01 05 04.40	016 14 42 * 004 54 30 * 002 52 00 * 022 25 00 * 001 11 54 *	33 18 00 # 77 06 00 # 41 15 00 # 18 12 00 # - 08 11 00 #	
LAPLAT C ARG SJUAN-GS ARG LAPLAT C ARG LAPLAT C ARG PORTLANO ORE	34 54 26 5 31 30 37 5 34 54 26 5 34 54 26 5 45 29 19 N	302 05 30 291 22 46 302 05 30 302 05 30 237 22 27	650 46	01 06 14.40 01 06 47.00 01 07 42.70 01 08 21.60 02 14 09.00	020 24 55 * 008 29 00 * 018 51 37 * 017 19 48 * 019 24 00 *	- 18 21 06 * - 74 42 00 * - 52 29 42 * - 62 48 48 * 03 00 00 *	
SACMTO E CAL SNYVAL A CAL MNLOPK P CAL WHTIER A CAL OAVIS CAL	38 32 55 N 37 22 20 N 37 27 25 N 33 58 40 N 38 19 48 N	238 14 51 237 59 40 237 50 35 241 58 25 238 31 12	15 17 14 149	02 14 43.30 02 14 49.20 02 15 13.00 02 15 32.00 02 15 34.60	017 54 49 * 017 40 00 * 018 42 00 * 017 23 00 * 019 47 18 *	37 29 00 * 45 06 00 * 45 24 00 * 37 36 00 * 19 09 00 *	
SNYVAL A CAL SNYVAL A CAL EOW AF O CAL SACMTO E CAL WHTIER A CAL	37 22 20 N 37 22 20 N 34 56 43 N 38 32 55 N 33 58 40 N	237 59 40 237 59 40 242 04 58 238 14 51 241 58 25	17 17 785 15 149	02 16 00.00 02 16 30.00 02 16 31.00 02 16 41.50 02 16 59.00	020 34 24 # 021 30 48 # 266 25 48 021 43 58 # 019 57 00 #	17 48 00 * 01 30 00 * 38 08 42 11 55 00 * 11 18 00 *	
WHTIER A CAL WHTIER A CAL SNYVAL A CAL TUCSON ARIZ TUCSON ARIZ	33 58 40 N 33 58 40 N 37 22 20 N 32 13 59 N 32 13 59 N	241 58 25 241 58 25 237 59 40 249 03 51 249 03 51	149 146 17 227 227	02 17 05.00 02 17 07.00 02 17 33.00 02 18 16.00 02 19 47.00	019 53 00 * 019 57 00 * 022 48 00 * 249 30 00 236 30 00	10 48 00 * 08 24 00 * 22 30 00 * 21 12 00 17 12 00	
WLNTCK B CAL NAGAL OYAOT L APADAMAY L APYSTMHSBH L APYSTMHSH MITAKA J	37 57 52 N 35 40 11 N 38 15 16 N 36 02 22 N 35 40 20 N	237 56 14 139 32 24 140 20 59 139 23 54 139 32 30	58 151 31 50	02 29 17.70 08 16 54.84 03 17 08.00 08 17 52.00 08 17 55.80	014 29 00 * 012 31 24 * 273 00 00 00 005 30 00 * 001 36 00	30 42 00 * 71 30 00 * 31 00 00 89 00 00 * 34 42 00	
SENDAI J MITAKA J HGSHMTSYMA J MITAKA J TAKAOA J	38 15 22 N 35 40 20 N 36 02 22 N 35 40 20 N 37 06 38 N	140 51 56 13° 32 30 139 23 54 13° 32 30 138 15 22	45 50 31 50 23	08 18 04.00 08 18 23.70 08 18 43.00 08 18 54.00 08 18 54.00	343 06 00 018 30 00 001 07 00 * 042 12 00 001 17 00 *	58 36 00 45 18 00 58 00 00 * 51 54 00 37 00 00 *	
MIZUKA IDO J MUSASHINO J KANYAMACHI J TOKYO JAPAN HGSHMTSYMA J	36 00 56 N 35 42 58 N 34 03 46 N 35 40 11 N 36 02 22 N	139 59 18 139 34 35 125 15 16 139 32 28 139 23 54	12 75 40 56 31	08 18 56.00 08 18 59.20 08 19 04.00 06 19 11.84 08 19 16.00	045 00 00 045 00 00 001 58 00 * 001 07 42 * 001 05 00 *	58 30 00 52 00 00 40 00 00 4 42 27 00 4 35 00 00 #	+
MITAKA J HGSHMTSYMA J MUSASHINO J SENOAI J YOKKAICHI J	35 40 20 N 36 02 22 N 35 42 58 N 38 15 22 N 35 00 15 N	139 32 30 139 23 54 139 34 35 140 51 56 136 39 00	50 31 75 45	08 19 23.10 08 19 28.00 08 19 34.40 08 19 41.00 08 19 43.00	077 24 00 001 07 00 * 090 00 00 121 18 00 001 45 00 *	49 30 00 70 42 00	
YAMAGATA J NAGOYA J MITAKA J KASHIWABRA J SENOAI J	38 15 16 N 35 08 57 N 35 40 20 N 34 30 24 N 38 15 22 N	140 20 59 136 59 11 139 32 30 135 48 15 140 51 56	151 50 50 66 45	08 19 45.00 08 19 48.00 08 19 48.00 08 19 55.00 08 20 01.00	135 06 00 090 00 00 100 06 00 002 45 00 1	40 18 00 34 30 00 44 54 00 27 00 00 45 54 00	*
HGSHMTSYMA J ASAHIKAWA J TOKYO JAPAN SUWA J WELLINGTN NZ	36 02 22 N 43 46 27 N 35 40 11 N 36 00 13 N 41 10 00 S	139 32 28	762	08 20 59.00 03 21 14.00 08 21 16.23 08 21 17.00 08 40 00.00	001 14 00 4 023 16 00 4 001 13 48 4 001 32 00 4 019 06 CC	- 33 00 00 - 16 07 00	*
WELLINGTN NZ WELLINGTN NZ HGSHMTSYMA J KAGOSHIMA J MIYAZAKI J	41 10 00 S 41 10 00 S 36 02 22 N 31 31 34 N 31 55 23 N	174 39 00 139 23 54 130 31 47	31	08 41 30.00 08 43 00.00 09 50 36.00 09 51 45.00 09 52 09.00	115 54 00 017 56 00 018 54 00	13 00 00	*
MIYAZAKI J KAGOSHIMA J KONKO J	31 55 23 N 31 31 34 N 34 32 31 N	100 31 47	13	09 52 11.00 09 52 13.00 09 52 14.00	019 25 00		

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR OECLINATION*	SLANT PANGE IN KM
			28 NOV 1958	(CONT)			
MIYAZAKI J MIYAZAKI J TAIPEI TAIWN MIYAZAKI J	31 55 23 N 35 00 15 N 31 55 23 N 25 02 42 N 31 55 23 N	131 25 24 136 39 00 131 25 24 121 30 02 131 25 24	8 8 22 8	09 52 15.00 09 52 19.00 09 52 40.00 09 52 41.00 09 52 50.00	019 22 00 # 019 30 00 # 019 49 00 # 002 08 00 # 020 02 00 #	00 00 00 # - 09 00 00 # - 10 00 00 # 34 36 00 # - 12 00 00 #	
TAIPEI TAIWN KAGOSHIMA J PERTH AUS PERTH AUS PERTH AUS	25 02 42 N 31 31 34 N 32 00 07 S 32 00 07 S 32 00 07 S	121 30 C2 130 31 47 115 51 10 115 51 10 115 51 10	22 13 5 5	09 53 03.50 09 54 19.00 13 11 03.30 13 12 17.10 13 13 22.40	002 05 00 # 021 50 00 # 279 16 00 252 05 00 220 40 00	23 09 00 # 38 00 00 # 14 51 00 29 36 00 19 56 00	
PERTH AUS PERTH AUS PERTH AUS PERTH AUS MIL RAO MASS	32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S 42 37 03 N	115 51 10 115 51 10 115 51 10 115 51 10 288 30 28	5 5 5 155	13 13 49.90 13 15 12.70 13 21 22.20 13 22 46.30 13 58 46.00	209 10 00 185 24 00 258 14 00 235 08 00 260 04 12	17 48 CC 09 37 CO 06 57 00 06 21 00 20 03 00	670
MIL RAD MASS MIL RAD MASS COPNON B DEN OARNOCH SCOT PIC MIDI FR	42 37 03 N 42 37 03 N 55 42 13 N 57 48 00 N 42 56 12 N	288 30 28 288 30 28 012 27 09 355 45 00 000 08 32	155 155 10 2862	13 59 42.00 14 01 28.00 15 46 44.00 17 18 54.50 17 19 54.00	002 54 00 008 24 00 019 43 54 # 019 50 00 # 326 54 00	30 18 00 14 30 00 10 24 00 * 04 00 00 * 24 00 0	505 920
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 37 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	17 20 27.00 17 20 37.00 17 20 45.00 17 20 57.00 17 21 06.00	327 06 00 327 12 00 327 12 03 327 18 00 327 36 00	34 36 00 38 36 00 43 30 00 49 36 00 54 42 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 06 32 000 03 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2362 2362	17 21 24.00 17 21 38.00 17 22 35.00 17 22 21.00 17 22 43.00	328 CO CO 328 OO OO 144 OO OO 145 48 OO 146 06 OC	68 42 00 80 42 00 70 42 00 59 24 00 48 18 00	
PIC MIOI FR PIC MIOI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 06 32 000 06 32 000 09 32 000 08 32	2862 2862 2862 2862 2862	17 22 51.00 17 22 59.00 17 23 12.00 17 23 28.00 17 23 39.00	146 36 00 146 36 00 146 48 00 147 00 00 147 00 00	42 36 00 33 36 00 33 48 00 25 42 00 25 42 00	
PIC MIDI FR	42 56 12 N 42 55 12 N 42 56 12 N 42 56 12 N 42 56 12 N	009 C8 32 000 C8 32 000 C8 32 000 C8 32 000 C8 32	2852 2862 2362 2862 2862	17 23 48.00 17 23 58.00 17 24 12.00 17 24 38.00 17 24 47.00	147 00 00 147 06 00 147 06 00 147 06 00 147 12 00	23 30 00 21 30 00 19 30 00 14 48 00 13 36 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 03 32 000 08 32 000 03 32 000 03 32	2862 2362 2662 2862 2862	17 24 59.01 17 25 12.06 17 25 26.00 17 25 44.00 17 25 54.00	147 12 00 147 12 00 147 12 00 147 18 00 147 30 00	12 06 00 10 36 00 09 30 00 07 24 00 06 30 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	17 26 31.00 17 26 47.00 17 26 59.00 17 27 08.00 17 27 25.00	147 48 00 147 54 00 148 00 00 148 00 00 148 00 00	03 30 00 02 36 00 01 48 00 00 36 00 - 00 12 00	
UNION JOHSBG PRET B S AF OLFSFTN S AF UNION JOHSBG UNION JOHSBG	26 10 55 S 25 43 43 S 25 57 33 S 26 10 55 S 26 10 55 S	028 04 30 028 12 42 028 14 53 028 04 30 026 04 30	1806 1311 1544 1806 1806	17 40 09.50 17 40 27.60 17 40 44.80 17 40 45.30 17 41 21.00	001 27 00 # 001 50 00 # 002 09 00 # 002 08 00 # 003 02 00 #	29 31 00 * 23 48 00 * 24 12 00 *	
PRET BS AF UNION JOMSEG SFERNNDO SP CPTWN AS AF CPTWN AS AF	25 43 43 S 26 10 55 S 36 27 42 N 33 56 00 S 33 56 00 S	028 12 42 028 04 30 353 47 42 018 28 37 018 28 37		17 41 48.30 17 42 03.00 18 55 41.51 19 15 18.00 19 15 28.00	003 44 00 9 003 45 00 9 018 58 48 9 021 51 00 9	- 17 00 00 + - 06 04 00 + - 37 34 00 +	
BLOMFTN S AF MIL RAD MASS MIL RAD MASS MIL RAD MASS MIL RAO MASS	42 37 03 N 42 37 03 N	288 30 28 288 30 28	155 155 155	19 16 00.00 20 20 55.40 20 21 23.30 20 22 33.20 21 52 33.00		- 62 42 00 4 06 42 00 05 54 00 03 42 00 40 18 00	1740 1810 2050 651
MIL RAD MASS MIL RAD MASS PT RICO A WI MLWKEE A WIS AMES A IOWA	42 37 03 N 18 10 31 N	288 30 28 292 54 42 271 51 05	155 2 408 3 294	21 54 22.00 21 56 56.00 23 00 28.00 23 21 54.80 23 22 27.50	137 42 00 027 17 24 312 12 00	45 18 00 10 36 00 25 13 12 23 30 00 24 00 00	606 1578

STATION	LATITUOE	LONGITUOF EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OP RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			28 NOV 1958	(CONT)			
AMES A IOWA MLWKEE A WIS AMES A IOWA AMES A IOWA AMES A IOWA	42 01 59 N 42 58 07 N 42 01 59 N 42 01 59 N 42 01 59 N	266 22 00 271 51 05 266 22 00 266 22 00 266 22 00	305 294 305 305 305	23 22 45 0 70 23 22 55 0 30 23 23 02 0 0 23 23 20 0 80 23 23 29 0 15	341 00 00 294 48 00 345 00 00 350 00 00 357 30 00	28 00 00 42 30 00 32 30 00 39 00 00 47 24 00	
MLWKEE A WIS AMES A IOWA MLWKEE A WIS AMES A IOWA AMES A IOWA	42 58 07 N 42 01 59 N 42 58 07 N 42 01 59 N 42 01 59 N	271 51 05 266 22 00 271 51 05 266 22 00 266 22 00	294 305 294 305 305	23 23 30.70 23 23 53.90 23 24 06.30 23 24 07.80 23 24 21.25	249 12 00 009 30 00 219 24 00 028 00 00 055 30 00	58 10 00 54 48 00 54 30 00 60 54 00 64 00 00	
AMES A IOWA CHI FAXN ILL KANCITY MO MLWKEE A WIS AMES A IOWA	42 01 59 N 41 59 00 N 39 02 02 N 42 58 07 N 42 01 59 N	266 22 00 272 21 00 265 25 08 271 51 05 266 22 00	305 21# 259 294 305	23 24 26.90 27 24 44.50 23 24 45.00 23 24 46.00 23 24 56.70	082 00 00 270 00 00 090 00 00 180 18 00 107 00 00	62 30 00 55 00 00 69 00 00 38 30 00	
PEORIA ILL AMES A IOWA AMES A IOWA AMES A IOWA AMES A IOWA	40 45 19 N 42 01 59 N 42 01 59 N 42 01 59 N 42 01 59 N	270 24 09 266 22 00 266 22 00 266 27 00 266 22 00	238 305 305 305 305	23 75 05 00 23 25 25 00 23 25 36 60 23 25 54 86 23 26 00 60	270 00 00 126 00 00 125 00 00 129 00 00 131 00 00	53 00 00 \$9 00 00 41 48 00 35 00 00 29 30 00	
AMES A IOWA AMES A IOWA AMES A IOWA AMES A IOWA AMES A IOWA	42 01 59 N 42 01 59 N 42 01 59 N 42 01 59 N 42 01 59 N	266 22 00 256 22 00 266 22 00 266 22 00 266 22 00	305 305 305 305 305	23 76 26 40 23 27 76 70 23 27 47 90 23 28 01 60 23 28 38 40	133 00 00 137 00 00 138 30 00 139 00 00 140 00 00	25 30 00 22 00 00 15 00 00 10 30 00 08 30 00 05 30 00	
						0, 30 00	
DALLAS P TEX MANHTN A KAN ALMGDO-GS.NM KANCITY MO ALRUO-GS NM	32 51 10 N 39 15 58 N 32 52 22 N 39 02 02 N 35 06 22 N	263 14 29 263 22 38 254 03 05 265 25 08 253 23 14	29 NOV 1958 172 408 1339 259 1565	00 34 24 00 00 54 58 00 00 55 32 00 00 55 45 03	019 15 25 * 016 28 30 * 014 51 12 * 270 00 00	- 05 30 00 * 21 26 24 * 56 00 00 * 06 30 00	
TUCSON ARIZ WICHITA KAN TUCSON ARIZ DENVR A COLO ALBUG A NM	32 13 59 N 37 41 44 N 32 13 59 N 39 44 52 N 35 05 03 N	249 03 51 262 45 19 249 03 51 255 03 24 253 21 24	227 413 227 1625 1520	90 56 32 00 90 57 14 05 90 57 15 55	017 52 00 * 006 15 00 * 017 32 30 * 013 30 00 22 30 00	51 48 00 <b>*</b> 87 45 00 <b>*</b> 12 36 00 <b>*</b> 38 48 00 33 30 00	
ALBUG 5 NM CHIN LAK CAL ALBUG 5 NM OK CY 3 OKLA ALBUG 8 NM	35 06 37 N 35 39 25 N 35 03 18 R 35 31 00 N 35 06 37 N	253 27 47 242 20 13 253 23 30 262 26 02 253 27 47	1667 701 1618	06 57 15.50 00 57 22.40 00 57 77.50 00 57 73.00 00 57 34.00	019 55 00 * 019 55 00 * 0270 00 00 0270 00 00 015 02 00 * 022 40 00 *	40 25 00 * 40 15 00 * 27 36 00 66 00 00 08 50 00 *	
EL PASO TEX ALMGDO-GS+NM ALMGOO-GS+NM ALBUO S NM OK CY A OKLA	31 49 41 N 32 52 22 N 32 52 22 N 35 03 18 N 35 33 50 N	253 36 36 254 03 05 254 03 05 253 23 30 262 29 20	1339 1339 161# 360	00 57 42.50 00 57 55.00 00 58 72.60 00 58 74.0 00 58 25.60	329 00 00 020 42 00 # 020 47 42 # 180 00 00 018 58 00 #	24 30 00 * 56 30 00 * 38 00 00 * 36 24 00 * 49 00 00	
ALBUG-GS NM ALMGDO-GS NM TUCSON ARIZ WHSD-A-GS NM TUCSON ARIZ	35 06 22 N 32 52 22 N 32 13 59 N 32 21 28 N 32 13 59 N	253 23 14 254 03 05 249 03 51 253 27 47 249 03 51	1565 1339 227 1234 227	00 58 40.00 00 55 47.00 00 58 49.00 00 59 28.00 01 00 43.00	022 40 00 # 022 18 30 # 109 00 00 023 29 17 # 135 00 00	- 06 00 00 * - 13 12 00 * 05 00 00 * 38 36 00 - 15 18 00 *	
ALBUG B NM STIAGO R CHI STIAGO R CHI SJUAN-GS ARG EOW AFB CAL	35 06 37 N 33 33 42 S 33 33 42 S 31 30 37 S 34 53 09 N	253 27 47 289 18 48 289 18 48 291 22 46 242 00 27	1667 573 573 650 793	01 01 18.70 01 16 57.00 01 17 23.50 01 17 52.00 02 26 45.00	000 23 30 * 020 56 00 * 020 45 36 * 019 26 00 * 283 18 00	14 12 00 - 43 54 00 # - 04 02 00 # - 18 23 00 # - 39 00 00 *	
EDW AFB CAL EDW AFB CAL EDW AFB CAL SACMTO E CAL EDW AFB CAL	34 53 09 N 34 53 09 N 34 53 09 N 36 32 55 N 34 53 09 N	242 00 27 242 00 27 242 00 27 242 00 27 238 14 51 242 00 27	793 793 793 15 793	02 27 00 00 02 27 15 00 02 27 30 00 02 27 38 40 02 27 45 00	278 48 00 273 42 00 268 00 00 C18 18 31 * 261 54 00	16 18 00 17 42 00 19 00 00 20 12 00 03 25 00 *	
EDW AFB CAL CHIN LAK CAL SNYVAL A CAL SACMTO E CAL EOW AFB CAL	34 53 09 N 35 39 25 N 37 22 20 N 38 32 55 N 34 53 09 N	242 00 27 242 20 13 237 59 40 238 14 51 242 00 27	793 701 17 15 793	02 28 00.00 02 28 03.90 02 28 10.20 02 28 11.90	255 18 00 270 00 00 018 40 36 * 018 54 39 *	21 06 00 21 54 00 12 30 00 00 00 00 *	
EDW AF D CAL WLNTCK B CAL WLNTCK D CAL	34 56 43 N 37 57 52 N 37 57 54 N	242 04 58 237 56 14 238 00 10	785 9	02 28 15.00 02 28 17.00 02 28 19.30 02 28 19.70	248 30 00 269 43 48 018 59 30 * 018 55 40 *	22 06 00 14 04 12 - 05 45 00 # - 05 54 00 #	

STATION	LATITUOE	LONGI TUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	ELEVATION OR DECLINATION*
			29 NOV 1958	3 (CONT)		
EDW AFR CAL EDW AFR CAL SACMTO E CAL EDW AFR CAL EDW AFR CAL	34 53 09 N 34 53 09 N 38 32 55 N 34 53 09 N 34 53 09 N	242 00 27 242 00 27 238 14 51 242 00 27 242 00 27	793 793 15 793 793	02 28 30.00 02 28 45.00 02 28 52.00 02 29 00.00 02 29 15.00	241 54 00 235 06 00 019 37 02 * 228 48 00 222 42 00	27 06 00 21 42 00 = 16 44 00 # 21 00 00 20 00 00
EDW AFR CAL EDW AFR CAL EDW AFR CAL EDW AFR CAL EOW AFR CAL	34 53 09 N 34 53 09 N 34 53 09 N 34 53 09 N 34 53 09 N	242 00 27 242 00 27 242 00 27 242 00 27 242 00 27	793 793 793 793 793	02 29 30.00 02 29 45.00 02 30 00.00 02 30 15.00 02 30 30.00	217 24 00 212 12 00 207 54 00 204 06 00 200 24 00	18 42 00 17 24 00 16 12 00 14 42 00 13 18 00
EDW AFB CAL SDIEGO P CAL EDW AFB CAL EDW AFB CAL EDW AFR CAL	34 53 09 N 32 46 00 N 34 53 09 N 34 53 09 N 34 53 09 N	242 00 27 243 01 05 242 00 27 242 00 27 242 00 27	793 403 793 793 793	02 30 45.00 02 30 45.00 02 31 00.00 02 31 15.00 02 31 30.00	197 24 00 019 30 06 * 194 42 00 192 12 00 190 00 00	12 00 00 - 20 48 00 # 10 42 00 09 30 00 08 18 00
EDW AFR CAL EDW AFR CAL EDW AFR CAL EDW AFR CAL HONOLULU PAC	34 53 09 N 34 53 09 N 34 53 09 N 34 53 09 N 21 18 13 N	242 00 27 242 00 27 242 00 27 242 00 27 242 00 27 202 20 45	793 793 793 793 94	02 31 45.00 02 32 00.00 02 32 15.00 02 32 50.00 05 37 15.00	187 48 00 186 C6 00 184 24 00 183 06 00 204 40 00	07 05 00 06 00 00 04 48 00 03 54 00 06 30 00
L AAATIM L IACMES L AXATIM L ATADAMAY NAGAL OYNOT	35 40 20 N 38 15 22 N 35 40 20 N 36 15 16 N 35 40 11 N	139 32 30 140 51 56 139 32 30 140 20 59 139 32 28	50 45 50 151 58	08 27 43.40 08 27 55.00 08 28 12.40 08 28 14.50 08 28 21.08	319 30 00 300 18 00 316 30 00 296 00 00 015 52 48 **	16 18 00 21 24 00 21 18 00 25 00 00 49 37 00 #
L AXATIM L AWUZ L AXATIM L TADAMAY L IHDAMAYMAX	35 40 20 N 36 00 13 N 35 40 20 N 38 15 16 N 34 03 46 N	137 32 30 138 07 43 139 32 30 140 20 59 135 15 10	50 762 50 151 40	08 26 37.50 08 29 05.00 08 29 07.20 08 29 11.00 08 29 21.00	312 30 00 017 56 00 * 305 36 00 270 00 00 000 53 00 *	27 06 00 52 00 00 <b>*</b> 36 00 00 44 00 00 37 00 00 <b>*</b>
L INDEMACY/AN L IACMES L ANATIM L ANATIM L AMYSTWHSDH	34 03 46 N 38 15 27 N 35 40 20 N 35 40 20 N 36 02 22 N	135 15 10 140 51 56 139 32 30 139 32 30 139 23 54	40 45 50 50 <b>31</b>	06 29 31.00 06 29 33.00 08 29 33.20 08 29 43.40 08 29 49.00	018 43 00 * 254 18 00 018 35 00 * 283 24 00 019 41 00 *	40 00 00 # 39 48 00 38 42 00 # 50 12 00 27 00 00 #
YOKKAICHI J HGSHYTSYMA J KONKO J KASHIWABRA J KANYAMACHI J	35 00 15 N 36 02 22 N 34 32 31 N 34 30 24 N 34 03 46 N	136 39 00 139 23 54 133 37 40 135 48 15 135 15 17	3 31 4 66 40	08 29 54.00 08 29 58.00 08 30 03.00 08 30 10.00 28 30 16.00	022 02 00 * 019 59 00 * 119 00 60 021 15 00 * 001 12 00 *	54 00 C0 # 23 00 00 # 34 06 00 64 00 00 # 37 00 00 #
NAPAN OYXOT  L AMYSTYHSSH  L IANDARA  L IANAMYNA  L IANAMAYNA	35 40 11 N 36 02 22 N 38 15 22 N 35 40 20 N 34 03 46 N	139 32 28 139 23 54 140 51 56 139 32 30 135 15 10	58 31 45 50 40	08 30 17.64 08 30 21.00 08 30 21.00 08 30 21.60 08 30 25.00	02C 22 24 # 021 21 05 # 216 18 00 232 00 00 225 00 00	14 43 00 <b>*</b> 09 00 00 <b>*</b> 35 54 00 57 12 00
L IHDAWAYNAY L IHDAWAYNAY C IHDAWAYNAY	34 03 46 N 36 00 13 N 34 03 46 N 34 03 46 N 34 32 31 N	135 15 10 138 07 43 135 15 10 135 15 10 133 37 40	40 762 40 40	08 30 26.00 05 30 36.00 08 30 37.00 08 30 40.00 08 31 03.00	000 ns 3n * 022 03 00 * 202 00 00 023 23 n3 * 131 00 00	51 0C C0 29 00 00 # -01 00 00 # 32 06 00 28 00 00 #
L AWUE L AMYSTMHEGH L ANATIM L AMYSTMHEGH	36 00 13 N 36 02 22 N 35 40 20 N 35 40 11 N 36 02 22 N	138 07 43 139 23 54 139 32 30 139 32 28 139 23 54	762 31 50 58 31	08 31 34.00 08 31 57.00 08 32 04.80 08 32 05.49 08 32 18.00	023 07 00 * 022 37 00 * 022 55 00 * 022 51 16 * 023 11 00 *	18 00 00 - 22 00 00 * - 28 00 00 * - 29 48 00 * - 30 28 00 * - 34 00 00 *
WELLINGTN NZ WELLINGTN NZ WELLINGTN NZ WELLINGTN NZ WELLINGTN NZ	41 10 00 S 41 17 90 S 41 17 90 S 41 10 00 S 41 17 90 S	174 39 00 174 46 00 174 46 00 174 39 00 174 46 00		C8 51 CO.CC O8 51 30.00 O8 53 30.00 O8 54 OC.00 O8 55 30.02	309 48 00 317 30 00 152 00 00 150 00 00 149 06 00	60 06 00 48 00 06 30 48 00 22 06 00 12 54 00
TAIPEI TAIWN TAIPEI TAIWN TAIPEI TAIWN TAIPEI TAIWN AOLAIO C AUS	25 02 42 N 25 02 42 N 25 02 42 N 25 02 42 N 34 44 00 S	121 30 02 121 30 02 121 30 02 121 30 02 121 30 02 138 40 00	22 22 22 22	10 03 02.20 10 03 54.70 10 04 01.60 10 04 58.80 10 21 09.00	C19 34 12 * 021 29 00 * 021 40 00 * 022 58 12 * 005 22 00 *	42 23 00 # 08 06 00 # 02 00 00 # = 29 09 36 #
ADLAIO A AUS PERTH AUS PERTH AUS PERTH AUS PERTH AUS	34 55 14 S 32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S	138 36 14 115 51 10 115 51 10 115 51 10 115 51 10	55 5 5 5	10 24 58.50 11 47 20.50 11 49 52.70 11 50 05.90 11 52 03.00	090 30 00 002 09 00 065 41 00 076 43 00 127 02 00	- 21 CO OO *  57 OO OO 12 38 OO 33 OC OO 32 30 OO 13 36 OO

SLANT RANGE IN KM

STATION	LATITUOE	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
٠			29 NOV 1958	(CONT)			
PERTH AUS PERTH AUS PERTH AUS PERTH AUS NIINSALO FIN	32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S 61 51 20 N	115 51 10 115 51 10 115 51 10 115 51 10 022 18 10	5 5 5 5 133	13 21 22 • 20 13 22 46 • 30 13 22 57 • 00 13 23 53 • 10 14 24 43 • 00	258 14 00 235 08 00 231 53 00 213 16 00 351 00 00	06 57 00 08 21 00 08 27 00 07 17 00 23 00 00	
ROYAL EONRG ROYAL EDNRG PIC MIDI FR PIC MIDI FR PIC MIDI FR	55 55 30 N 55 55 30 N 42 56 12 N 42 56 12 N 42 56 12 N	356 48 59 356 48 59 000 08 32 000 08 32 000 08 32	146 146 2852 2862 2862	17 27 02.50 17 27 06.00 17 27 17.00 17 27 36.00 17 28 00.00	017 30 00 * 017 33 00 * 316 00 00 314 00 00 311 30 00	02 30 00 * 12 30 00 * 97 06 00 00 00 11 42 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	17 28 09.00 17 28 19.00 17 28 29.00 17 29 40.00 17 28 52.00	309 54 00 308 36 00 307 24 00 305 30 00 303 00 00	12 36 00 14 18 00 15 24 00 17 06 00 19 12 00	
PIC MIOI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 06 32 000 06 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	17 29 04.00 17 29 13.00 17 29 23.00 17 29 33.00 17 29 42.00	299 30 00 297 36 00 293 00 00 296 48 00 287 06 00	21 12 00 22 54 00 24 30 00 27 00 00 29 00 00	
PIC MIOI FR PIC MIOI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2 <b>5 6 2</b> 2 8 6 2 2 2 6 2 2 8 6 2 2 8 6 2	17 29 49.00 17 29 58.00 17 30 03.00 17 30 17.00 17 30 26.00	283 42 00 279 30 00 273 18 00 267 12 00 260 18 00	30 24 00 . 32 18 00 34 18 00 36 00 00 37 24 00	
PIC MIDI FR MAORID SP MADRIO SP PIC MIDI FR PIC MIDI FR	42 56 12 N 40 24 30 N 40 24 30 N 42 56 12 N 42 56 12 N	000 08 32 356 18 43 356 18 43 000 08 32 000 06 32	2962 655 655 2662 2862	17 30 37.00 17 30 47.00 17 30 53.00 17 30 56.00 17 31 05.00	249 36 00 020 30 00 * 000 00 00 233 05 00 226 24 00	38 24 00 45 00 00 # 90 00 00 38 42 00 37 24 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2862 2862 2862 2862 2862	17 31 15.00 17 31 27.00 17 31 38.00 17 31 49.00 17 31 58.00	218 48 00 213 30 00 204 00 00 198 54 00 194 42 00	36 00 00 34 00 00 31 54 00 29 36 00 27 24 00	
PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 08 32 000 08 32 000 08 32	2 962 2862 2862 2862 2862 2862	17 32 00.00 17 32 18.00 17 32 30.00 17 32 39.00 17 32 53.00	191 06 00 187 54 60 184 42 00 182 30 00 000 00 00	25 12 00 23 24 00 21 06 00 19 42 00 17 18 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 05 32 000 08 32 000 08 32 000 08 32 000 07 32	2862 2552 2862 2862 2862 2862	17 33 17.00 17 53 25.00 17 33 37.00 17 33 46.00 17 34 00.00	174 48 00 174 42 00 173 18 00 172 00 00 . 171 06 00	14 00 00 12 54 00 11 36 00 10 18 00 09 06 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 05 32 000 03 32 000 05 32	2862 2862 2862 2662 2662	17 34 11.00 17 34 25.00 17 34 37.00 17 34 48.00 17 34 57.00	170 00 00 169 00 00 168 00 00 167 30 00 167 00 00	08 00 00 06 48 00 05 36 00 04 48 00 04 18 00	
PIC MIDI FR PIC MIDI FR PRET B S AF UNION JOHSEG PRET E S AF	42 56 12 N 42 56 12 N 25 43 43 S 26 10 55 S 25 43 43 S	000 08 32 000 08 32 028 12 42 028 04 30 028 12 42	2962 2862 1311 1806 1311	17 35 54.00 17 36 04.00 17 48 47.50 17 48 58.60 17 49 41.50	164 18 00 164 06 00 021 52 00 # 022 04 42 # 022 21 00 #	25 36 00 1	•
JOHBG C S AF JOHBG E S AF JOHBG B S AF PPET B S AF BLOMFTN S AF	26 07 00 S 26 08 00 S 26 11 42 S 25 43 43 S 29 06 19 S	028 12 42	1708 1311	17 49 56.50 17 50 05.40 17 50 55.50 17 50 59.20 17 52 43.00	022 48 00 4 022 56 00 4 000 45 00 4 000 53 00 4	- 16 06 00 · - 63 00 00 · - 69 48 00 · ·	•
MIL RAD MASS MIL RAD MASS MIL RAO MASS MIL RAD MASS MIL RAD MASS	42 37 03 N	288 30 28 288 30 28 288 30 28	155 155 <b>155</b>	20 29 00.00 20 29 56.00 20 30 56.00 21 59 29.00 22 00 32.00	055 06 00 071 12 00 084 48 00 313 54 00 299 30 00	11 42 00 09 42 00 06 24 00 20 24 00 38 36 00	1360 1475 1735 975 627
N.LONDN CONN BRYN ATHN PA MIL RAD MASS CAMBROG MASS CAMBROG MASS	40 06 00 N 42 37 03 N 42 22 47 N	284 56 00 288 30 28 288 52 14	65 155 24	22 01 00.00 22 01 55.00 22 02 15.00 22 02 27.00 22 03 23.00	090 00 00 185 36 00 283 00 00	04 23 42 63 00 00 43 24 00 45 00 00 43 00 00	585

STATION	LATITUDE	LONGITUDE	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR OECLINATION*	SLANT RANGE IN KM
			29 NOV 1958	(CONT)			
MIL RAO MASS AMES A IOWA AMES A IOWA AMES A IOWA AMES A IOWA	42 37 03 N 42 01 59 N 42 01 59 N 42 01 59 N 42 01 59 N	288 30 28 266 22 00 266 22 00 266 22 00 266 22 00	155 305 305 305 305 305	22 03 39.00 23 29 39.40 23 30 14.70 23 30 52.10 23 31 20.10	164 42 00 314 30 00 310 00 00 299 30 00 284 30 00	19 00 00 17 06 00 23 42 00 34 48 00 46 00 00	928
CHI FAXN ILL AMES IOWA AMES A IOWA PEORIA ILL AMES A IOWA	41 59 00 N 42 01 43 N 42 01 59 N 40 45 19 N 42 01 59 N	272 21 00 266 20 59 266 22 00 270 24 09 266 22 00	218 205 236 305	23 31 43.00 23 31 51.00 23 31 52.90 23 32 03.00 23 32 19.30	270 00 00 . 019 34 28 * 245 30 00 270 00 00 206 30 00	25 00 00 24 29 47 # 56 18 00 34 00 00 51 18 00	
KANCITY MO AMES A IOWA AMES A IOWA AMES A IOWA WASH WLSN OC	39 02 02 N 42 01 59 N 42 01 59 N 42 01 59 N 38 50 00 N	265 25 3° 266 22 00 266 22 00 266 22 00 282 59 24	259 305 305 305	23 32 31.00 23 32 43.60 23 32 45.00 23 33 14.60 23 33 18.00	021 28 00 * 021 29 19 * 186 00 00 173 00 00 017 25 00 *	39 00 00 * - 05 49 40 * 41 30 00 30 36 00 96 30 00 *	
DAYTON B O BRISTOL TENN OAYTON B O TERRHAUT IND GRNSBRO A NC	39 50 14 N 36 35 03 N 39 50 14 N 39 31 38 N 36 04 38 N	275 44 03 277 50 31 275 44 03 272 36 10 290 07 57	249 527 249 155 265	23 33 23.40 23 33 24.50 23 33 31.20 23 33 35.30 23 33 51.00	242 57 00 270 00 00 C19 08 00 * 225 00 00 017 48 00 *	21 28 00 16 30 00 - 03 40 00 * 31 00 00 04 00 00 *	
AMES A 10WA OAYTON B O MANH P O KAN AMES A 10WA BILOXI MISS	42 01 59 N 39 50 14 N 39 11 18 N 42 01 59 N 30 23 27 N	266 22 00 275 44 C3 263 24 93 266 22 00 271 08 28	305 249 347 305 7	23 33 57.70 23 34 01.00 23 34 27.00 23 34 27.70 23 35 07.00	166 00 00 019 35 00 * 140 54 00 163 00 00 270 00 00	20 18 00 - 14 00 00 * 19 33 00 15 00 00 88 00 00	
WASH WLSN DC EGLN AFR FLA EGLN AFR FLA LAPLAT C ARG LAPLAT C ARG	38 50 00 N 30 33 00 N 30 33 00 N 34 54 26 S 34 54 26 S	28? 59 24 273 22 41 273 22 41 302 05 30 302 05 30		22 35 18 00 23 35 23 50 23 35 51 20 23 53 12 00 23 53 53 40	019 10 00 # 020 37 21 # 002 12 84 # 022 24 26 # 022 57 10 #	- 21 00 00 * 12 04 57 * - 06 36 44 * 04 10 12 * - 29 42 00 *	
V DLORES ARG LAPLAT C ARG LAPLAT C ARG LAPLAT C ARG	31 56 32 5 34 54 26 5 34 54 26 5 34 54 26 5	294 53 30 302 05 30 302 05 30 302 05 30	598	23 53 56:00 23 54 27:40 23 55 47:50 23 56 50:20	003 50 00 * 000 17 50 * 000 41 46 * 009 28 00 *	- 24 00 00 * - 55 10 18 * - 66 39 48 * - 56 38 30 *	
ALCUTA F CAL	20 27 20 1	257 22 2/	30 NOV 195		003 // /0 #	57 or oo v	
SACMTO F CAL ALBUO-GS NM TUCSON ARIZ EDW AF O CAL EDW AF D CAL	38 74 30 N 35 06 22 N 32 13 59 N 34 56 43 N 34 56 43 N	237 53 74 253 23 14 249 03 51 242 04 58 242 04 58	835 1565 227 765 785	01 02 12.83 01 02 21.00 01 03 17.00 01 03 34.00 01 03 36.00	001 44 48 * 015 56 00 * 320 00 00 051 37 12 054 57 36	57 06 00 * 33 12 00 * 25 12 00 56 42 00 56 45 24	
DENVR A COLO DAVSAFP ARIZ EDW AF O CAL TUCSON ARIZ ALBUO S NM	39 44 52 N 32 03 00 N 34 56 43 N 32 13 59 N 35 03 18 N	255 03 24 249 05 00 242 04 58 249 03 51 253 23 30	1625 875 785 227 1618	01 03 47.00 01 04 00.00 01 04 00.00 01 04 01.00 01 04 01.00	246 15 00 330 00 00 090 03 54 310 00 00 270 00 00	16 00 00 45 00 00 52 52 12 40 00 00 25 00 00	
EOW AF O CAL EDW AF O CAL ALBUO-GS NM SDIEGO P CAL EOW AF O CAL	34 56 43 N 34 56 43 N 35 06 22 N 32 46 00 N 34 56 43 N	242 04 58 242 04 58 253 23 14 243 01 05 242 04 58	785 785 1565 403 785	01 04 04.00 01 04 34.00 01 04 35.00 01 05 00.00 01 05 04.00	094 37 12 116 36 00 018 41 00 * 060 00 00 127 03 00	51 19 48 39 10 48 01 30 00 * 75 00 00 29 12 00	
ALBUQ A NM ALBUO A NM MANHTN B KAN ALBUO A NM EDW AF O CAL	35 05 03 N 35 05 03 N 39 13 51 N 35 05 03 N 34 56 43 N	253 21·24 253 21 24 263 22 54 253 21 24 242 04 58	1520 1520 409 1520 785	01 05 18.50 01 05 20.00 01 05 28.90 01 05 32.00 01 05 34.00	019 42 00 * 019 45 00 * 018 54 45 * 020 00 00 * 132 46 48		•
TUCSON ARIZ TUCSON ARIZ EOW AF O CAL L CRUC A NM EOW AF O CAL	32 13 59 N 32 13 59 N 34 56 43 N 32 19 42 N 34 56 43 N	249 C3 51 249 O3 51 242 O4 58 253 O9 10 242 C4 58	227 227 785 1186 785	01 05 38.00 01 05 47.00 01 06 04.00 01 06 20.00 01 06 34.00	188 00 00 180 00 00 136 15 00 208 00 00 138 41 24	51 24 00 47 00 00 16 29 24 24 00 00 12 22 48	
EOW AF O CAL TUCSON ARIZ EOW AF O CAL EOW AF O CAL EOW AF O CAL	32 13 59 N 34 56 43 N 34 56 43 N	242 04 58 249 03 51 242 04 58 242 04 58 242 04 58	785 227 785 785 785	01 07 04.00 01 07 26.00 01 07 34.00 01 08 04.00 01 08 34.00	141 45 36 142 49 12	08 56 24 17 12 00 06 17 24 03 55 39 01 53 24	
EDW AF O CAL OAVSAFB ARIZ SACMTO F CAL SACMTO F CAL SACMTO F CAL	32 03 00 N 38 24 30 N 38 24 30 N	249 05 00 237 53 24 237 53 24	825 835 835	01 09 01.00 01 10 00.00 02 34 18.20 02 35 30.50 02 35 43.80	150 00 00 017 57 50 018 53 06	* - 18 51 00	*

STATION	LATITUOE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN #	OR	SLANT RANGE IN KM
			30 NOV 1958	(CONT)			
WLNTCK B CAL PA ALHHO L CHOON MACACL OYNOT MIYASAKI J	37 57 52 N 39 57 28 N 33 33 25 N 35 40 11 N 31 55 23 N	237 56 14 284 59 18 133 30 35 139 32 28 131 25 24	9 32 30 56 8	02 35 50.20 05 05 30.00 08 34 23.00 08 35 02.66 08 36 19.00	019 03 30 # 170 30 00 017 45 0C # 008 03 00 # 000 01 00 #	- 21 54 00 * 21 22 00 54 00 00 * 95 30 00 * 90 00 00 *	
TOKYO JAPAN TOKYO JAPAN WELLINGTN NZ MANILA PHIL ADLAIO A AUS	35 40 11 N 35 40 11 N 41 19 00 S 16 24 46 N 34 55 14 S	139 32 28 139 32 28 174 48 00 120 34 45 138 36 14	58 58	08 36 24.26 08 37 24.17 08 59 00.00 10 11 35.00 10 24 58.50	019 53 24 * 020 57 42 * 012 48 00 * 022 56 00 * 090 30 00	- 23 18 00 * - 35 25 00 * - 66 36 00 * - 40 00 00 * 57 00 00	
ADLAID A AUS WOOMER AUS ADLAID C AUS ADLAID A AUS PERTH AUS	34 55 14 S 31 06 06 S 34 44 00 S 34 55 14 S 32 00 07 S	138 36 14 136 46 54 138 40 00 138 36 14 115 51 10	55 162 55 5	10 26 08.00 10 26 08.56 10 26 17.00 10 26 22.50 11 51 35.20	006 25 00 # 007 38 30 # 006 45 00 # 006 55 00 # 335 44 00	- 50 00 00 * - 52 47 00 * - 51 00 00 * - 50 30 00 * 13 12 00	
PERTH AUS PERTH AUS PERTH AUS PERTH AUS MIL RAD MASS	32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S 42 37 03 N	115 51 10 115 51 10 115 51 10 115 51 10 288 30 28	5 5 5 5	11 53 39.10 11 54 36.50 11 55 09.30 11 57 26.10 12 43 57.70	344 26 00 141 22 00 147 37 00 151 11 00 044 06 00	56 43 00 57 45 00 34 42 00 06 22 00 04 48 00	1368
MIL RAD MASS MIL RAD MASS MIL RAD MASS MIL RAD MASS SHIP IND OCN	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 11 21 00 N	288 30 28 288 30 28 288 30 28 288 30 28 288 30 28 053 37 00	155 155 155 155	12 44 25.40 14 12 36.20 14 14 05.80 14 15 33.30 14 40 00.00	042 36 00 294 48 00 326 00 00 352 30 00 320 00 00	02 21 00 05 18 00 06 54 00 04 12 00 35 00 00	1562 2858 1228 1463
SHIP IND OCN ATHENS GR ATHENS GR ATHENS GR ATHENS GR	11 21 00 N 37 58 19 N 37 58 19 N 37 58 19 N 37 58 19 N	053 37 00 023 43 01 023 43 01 023 43 01 023 43 01	110 110 110 110	14 43 00.00 16 03 24.30 16 04 08.80 16 04 57.80 16 05 27.80	194 00 00 290 18 00 273 36 00 248 48 00 229 00 00	41 00 00 17 48 00 22 24 00 25 24 00 24 54 00	
ATHENS GR ATHENS GR ATHENS GR ATHENS GR NIN STEW ENG MIL RAD MASS	37 58 19 N 37 58 19 N 37 58 19 N 54 57 00 N 42 37 G3 N	023 43 01 023 43 01 023 43 01 355 30 00 288 30 28	110 110 110	16 06 03.30 16 06 39.30 16 07 13.30 17 31 22.50 20 28 42.00	212 42 00 200 42 00 192 12 00 219 00 00 005 00 00	20 42 00 16 00 00 12 18 00 13 00 00 10 12 00	1325
MIL RAD MASS MIL RAD MASS MIL RAD MASS MIL RAD MASS WLMGTN P DEL	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 39 46 25 N	288 30 26 288 30 28 288 30 28 288 30 28 284 25 33	155 155 155 155 84	20 30 14.00 20 33 07.00 22 91 33.00 22 03 35.00 22 04 01.90	036 24 00 095 30 00 291 24 00 223 42 00 021 48 42 **	16 18 00 08 18 00 18 12 00 27 36 00 - 02 12 00 *	1050 1475 975 745
CAMBROG MASS BRYN ATHN PA CAMBROG MASS BRYN ATHN PA MIL RAO MASS	42 22 47 N 40 08 00 N 42 22 47 N 40 08 00 N 42 37 C3 N	288 52 14 284 56 00 288 52 14 284 56 00 288 20 28	24 85 24 85 155	22 04 09.00 22 04 10.00 22 05 16.00 22 05 26.00 22 05 37.00	208 00 00 180 00 00 188 30 00 022 55 00 4 175 24 00	22 00 00 43 00 00 14 00 00 - 30 00 00 *	1683
WOODBRD CONN ANTIG M9A ANTIG M9A ANTIG M9A ANTIG M9A	41 21 00 N 17 08 51 N 17 08 51 N 17 08 51 N 17 08 51 N	287 00 00 298 12 37 298 12 37 298 12 37 298 12 37	7 7 7 7	22 07 20 • 00 22 08 19 • 00 22 08 49 • 00 22 09 19 • 00 22 09 49 • 00	230 00 00 316 26 06 305 44 05 295 56 24 269 27 00	39 30 00 22 33 00 27 40 30 36 33 00 46 45 54	
ANTIG M9A ANTIG M9A ANTIG M9A ANTIG M9A ANTIG M9A	17 08 51 N 17 08 51 N 17 08 51 N 17 08 51 N 17 08 51 N	298 12 37 298 12 37 298 12 37 298 12 37 298 12 37	7 7 7 7 7	22 10 19.00 22 10 49.00 22 11 19.00 22 11 20.00 22 13 30.00	228 43 30 200 29 12 186 32 24 182 38 42 168 33 18	48 58 30 39 47 30 30 03 18 28 02 42 08 41 30	
ANTIG M9A AMES A IOWA TERRHAUT IND AMES A IOWA KANCITY MO	17 08 51 N 42 01 59 N 39 31 38 N 42 01 59 N 39 02 02 N	298 12 37 266 22 00 272 36 10 266 22 00 265 25 08	7 305 155 305 259	22 13 43.00 23 31 42.90 23 33 17.00 23 33 28.70 23 34 57.00	168 15 18 288 30 00 270 00 0C 230 30 00 019 20 00	07 35 42 19 18 00 14 00 00 27 42 00 * 05 00 00 *	
OAYTON B O OAYTON B O MANH P D KAN MANH P O KAN BILOXI MISS	39 50 14 N 39 50 14 N 39 11 18 N 39 11 18 N 30 23 27 N	275 44 03 275 44 03 263 24 00 263 24 00 271 08 28	347 347	23 35 01.60 23 35 24.70 23 35 30.80 23 35 45.70 23 35 53.00		18 49 00 -	
OAYTON 8 O CHOSICA PERU HUANCAYO PER HUANCAYO PER ANTEGSTA CHI	12 01 27 S 12 01 27 S	284 40 28	3476 3476	23 36 26 • 10 23 44 40 • 00 23 50 18 • 00 23 50 48 • 00 23 51 00 • 40	151 00 00 003 30 00 004 30 00	16 11 00 * = 68 00 00 * * = 69 00 00 *	

STATION	LATITU0E	LONGI TUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
		1/ •	20 104 1050	(60)(7)			
			30 NOV 1958	(CONT)			
SJUAN-GS ARG V DLORES ARG V DLORES ARG	31 30 37 S 31 56 32 S 31 56 32 S	294 53 30 294 53 30	650 598 598	23 52 40.00 23 53 35.00 23 54 30.00	001 07 00 * 023 10 00 * 003 50 00 *	18 00 00 * - 30 00 00 * - 75 00 00 *	•
	•		1 OEC 1958				
SACMTO F CAL STFD RES CAL ALBUO A NM ALBUO A NM ALBUO GS NM	38 24 30 N 37 24 11 N 35 05 03 N 35 05 03 N 35 06 22 N	237 53 24 237 49 29 253 21 24 253 21 24 253 23 14	835 152 1520 1520 1565	01 03 14.20 01 03 47.50 01 04 13.50 01 04 22.00 01 04 23.00	021 43 18 * 121 00 00 017 02 0C * 017 07 00 * 017 12 00 *	40 26 00 # 65 00 00 10 30 00 # 09 00 00 # 06 06 00 #	400
ALBUO S NM ALMGDO-GS,NM ALBUO-GS,NM ALMGDO-GS,NM TUCSON ARIZ	35 03 16 N 32 52 22 N 35 06 22 N 32 52 22 N 32 13 59 N	253 23 30 254 03 05 253 23 14 254 03 05 249 03 51	1618 1339 1565 1339 227	01 04 27.00 01 04 32.00 01 04 41.00 01 04 50.00 01 04 52.00	270 00 00 016 54 06 * 017 28 00 * 017 09 42 * 260 00 00	12 00 00 14 36 00 * 03 36 00 * 10 24 00 * 24 36 00	
EDW AF O CAL EL PASO TEX TUCSON ARIZ L CRUC A NM EDW AF O CAL	34 56 43 N 31 49 41 N 32 13 59 N 32 19 42 N 34 56 43 N	242 04 58 253 36 36 249 03 51 253 09 10 242 04 58	785 227 1186 785	01 05 03.00 01 05 07.00 01 05 25.00 01 05 26.00 01 05 33.00	179 46 48 275 00 00 260 00 00 C17 38 00 * 168 12 00	53 4C 30 15 00 00 29 00 00 04 00 00 # 35 30 00	
ALMGDC-GS,NM ALMGDO-GS,NM L CRUC A NM EOW AF O CAL TUCSON ARIZ	32 52 22 N 32 52 22 N 32 19 42 N 34 56 43 N 32 13 59 N	254 03 05 254 03 05 253 09 10 242 04 56 249 03 51	1339 1339 1186 785 227	01 05 34.00 01 05 53.00 91 05 55.00 01 06 03.00 01 06 10.09	017 50 30 # 018 05 30 # 253 00 00 163 31 48 230 30 00	- 00 48 00 # - 06 00 00 # 16 30 00 25 16 12 29 00 00	
EDW AF 0 CAL TUCSON ARIZ EDW AF D CAL EDW AF D CAL EDW AF D CAL	34 56 43 N 32 13 59 N 34 56 43 N 34 56 43 N 34 56 43 N	242 04 58 249 03 51 242 04 58 242 04 58 242 04 58	785 227 785 785 785	91 96 33.00 01 96 44.00 01 97 93.00 01 97 33.00 91 98 93.00	161 02 24 211 00 00 159 31 12 158 30 00 157 46 12	18 25 12 24 00 00 13 33 00 09 49 12 06 48 54	
TUCSON ARIZ  EDW AF D CAL  TUCSON ARIZ  ALMGDD-GS,NM  ALMGDD-GS,NM	32 13 59 N 34 56 43 N 32 13 59 N 32 52 22 N 32 52 22 N	249 03 51 242 04 58 249 03 51 254 03 05 254 03 05	227 785 227 1339 1339	01 08 33.00 01 08 33.00 01 08 47.00 01 09 12.00 01 09 29.00	182 30 00 157 13 12 022 20 00 * 025 55 00 * 021 93 18 *	10 00 00 04 18 18 - 50 00 00 * - 49 18 00 * - 51 00 00 *	
MANHTM B KAN WHTIER A CAL GIFU J ASAHIKAMA J HGSHMTSYMA J	39 13 51 N 33 58 40 N 35 25 49 N 43 46 27 N 36 02 22 N	263 22 54 241 55 25 136 47 C4 142 21 50 139 23 54	409 149 339 113 31	01 16 27.45 02 38 02.00 06 26 04.00 08 32 13.00 08 32 57.00	021 17 45 018 45 00 * 114 12 00 018 10 00 * 017 07 00 *	76 49 48 - 25 00 00 # 24 12 00 - 09 00 00 # 81 00 00 #	
KANYAWACH: J YOKKATCHI J YOKKO JAPAN MANAZURU 2 J MIYAZAYIM	34 03 46 N 35 00 15 N 35 40 11 N 35 20 04 N 31 55 23 N	135 15 10 136 39 00 139 32 28 139 07 48 131 25 24	43 56 50 8	08 33 20.00 08 74 13.00 08 34 27.33 08 34 29.00 05 34 33.00	017 33 00 * 233 30 00 C16 26 48 * C18 28 00 * G20 54 00 *	13 00 00 * 19 00 00 - 17 18 00 * - 19 00 00 * - 05 00 00 *	
MITAKA J HGSHVTSYMA J KOCHI J HGSHMTSYMA J KONKO J	35 40 20 N 36 02 22 N 33 33 25 N 36 02 22 N 34 32 31 N	139 37 30 139 23 54 133 30 35 139 23 54 133 37 40	50 31 30 31 4	08 34 39.10 08 34 47.00 08 35 02.00 08 35 04.00 08 35 19.00	233 24 00 018 57 00 * 020 45 00 * 019 18 00 * 192 00 00		
TOKYO JAPAN MITAKA J MITAKA J MITAKA J	35 40 11 N 34 50 25 N 35 40 20 N 35 40 20 N 34 32 31 N	139 32 28 134 41 24 139 32 30 139 32 30 133 37 40	58 25 50 50	08 35 22.19 08 35 24.00 08 35 36.20 06 36 08.40 98 36 27.00	019 19 54 # 197 24 00 215 54 00 208 00 00 179 00 00	- 30 49 00 * 16 24 00 09 42 00 07 36 00 09 30 00	•
ADLAID A AUS ADLAID A AUS WOOMER AUS WOOMER AUS ADLAIO A AUS	34 55 14 5 34 55 14 5 31 06 05 5 31 06 07 5 34 55 14 S	138 36 14 138 36 14 136 46 54 136 47 07 138 36 14	55 55 162 162 55	10 21 43.00 10 22 05.00 10 22 21.46 10 22 33.70 10 22 46.00	021 40 00 # 323 00 00 022 45 00 # 177 46 12 022 20 00 #	42 00 00 82 07 00 4 33 08 24	•
WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS WOOMER AUS	31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S 31 06 07 S	136 47 07 136 47 07 136 47 07 136 47 07 136 47 07		10 22 52.41 10 23 10.41 10 23 16.19 10 23 26.35 10 23 46.23	168 02 24 166 48 36 165 42 00	26 05 24 20 51 36 19 00 00 17 13 17 13 28 12	
ADLAID A AUS ADLAID A AUS ADLAID A AUS SALSBURY AUS SALSBURY AUS	34 55 14 S 34 55 14 S 34 55 14 S 34 43 58 S 34 43 58 S	138 36 14 138 38 47	55 55 32	. 10 24 09.80 10 24 19.00 10 25 02.00 10 25 09.996 10 25 25.97	008 45 00 009 20 00 315 45 22		

STATION	LATITUOE	LONGITUDE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			1 OEC 1958	(CONT)			
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	138 38 47 138 38 47 138 38 47 138 38 47 138 38 47	3 2 3 2 3 2 3 2 3 2	10 25 41.61 10 26 16.95 10 26 29.75 10 27 09.08 10 27 19.50	305 47 10 262 45 00 228 06 40 175 22 12 170 59 24	40 01 12 61 49 12 62 58 44 39 09 00 33 40 23	
SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS SALSBURY AUS	34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S 34 43 58 S	13P 38 47 138 38 47 138 38 47 138 38 47 138 38 47	32 32 32 32 32	10 27 29.91 10 27 39.07 10 28 05.32 10 26 12.89 10 28 43.39	167 54 00 165 48 07 161 49 37 161 00 29 158 35 24	29 09 04 25 46 44 18 29 49 16 51 50 11 35 24	
SALSBURY AUS SALSBURY AUS SALSBURY AUS JORL BNK ENG PERTH AUS	34 43 58 S 34 43 58 S 34 43 58 S 53 14 11 N 32 00 07 S	138 38 47 138 38 47 138 38 47 357 41 38 115 51 10	32 32 32 5	10 28 51.90 10 28 59.93 10 29 36.48 11 13 35.03 11 49 05.30	158 05 24 157 39 47 156 09 00 343 55 00 316 42 00	10 25 01 09 23 24 05 27 00 03 58 00 18 00 00	1250
PERTH AUS PERTH AUS PERTH AUS PERTH AUS MIL PAD MASS	32 00 07 S 32 00 07 S 32 00 07 S 32 00 07 S 42 37 03 N	115 51 10 115 51 10 115 51 10 115 51 10 288 30 28	5 5 5 155	11 50 35.40 11 51 10.70 11 53 01.20 11 54 0+.50 12 35 16.00	298 54 00 276 00 00 176 30 00 165 18 00 211 06 00	27 48 00 39 54 00 21 24 00 09 48 00 01 54 00	1403
MIL RAD MASS MIL PAD MASS MIL PAD MASS MIL RAD MASS MIL RAD MASS	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N	288 30 28 288 30 28 288 30 28 288 30 28 288 30 28	155 155 155 155	12 37 42.00 12 40 41.00 12 41 46.00 14 10 17.00 14 11 27.00	207 24 C0 034 36 00 034 24 00 310 18 00 332 18 00	34 00 00 03 54 00 92 42 00 03 36 00 03 30 00	378 1040 1527 1435 1442
MIL RAD MASS COPNON B DEN COPNON B DEN FARNHAM ENG FARNHAM ENG	42 37 03 N 55 42 12 N 55 42 13 N 51 12 00 N 51 12 00 N	288 30 28 012 27 09 012 27 09 359 12 00 359 12 00	155 10 1	14 13 02.00 15 57 20.80 15 57 31.50 17 26 35.00 17 27 36.00	356 24 00 019 10 00 * 029 18 00 241 30 60 017 53 00 *	01 06 00 - 19 00 00 * 13 48 00 07 06 00 - 11 30 00 *	
PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR PIC MIDI FR	42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N 42 56 12 N	000 08 32 000 08 32 000 04 32 000 08 32 000 08 32	2662 2862 2662 2862 2862	17 30 55.00 17 31 23.00 17 31 48.00 17 31 57.00 17 32 15.00	036 42 00 026 06 00 023 54 00 022 00 00 018 48 00	07 06 00 05 24 00 04 54 00 04 18 00 03 06 00	
PIC MIDI FR PIC MIDI FR PIC MIDI FR EL GOLEA ALG EL GOLFA ALG	42 56 12 N 42 56 12 N 42 56 12 N 30 34 00 N 30 34 00 N	000 04 32 000 05 32 000 05 32 002 52 00 002 52 00	2862 2862 2862	17 32 31.00 17 32 50.00 17 32 59.00 17 35 00.00 17 35 20.00	016 24 00 013 48 00 013 42 00 202 18 00 196 06 00	02 06 00 01 06 00 00 42 00 11 24 00 09 00 00	
EL GOLFA ALG EL GOLFA ALG EL GOLFA ALG EL GOLFA ALG HANOVR C GER	30 34 00 N 30 34 00 N 30 34 00 N 30 34 00 N 52 24 06 N	002 52 00 002 52 00 002 52 00 002 52 00 004 45 33		17 35 40.00 17 36 00.00 17 36 25.00 17 36 50.00 17 37 52.90	192 24 00 189 36 00 185 48 00 182 48 00 002 21 30	07 30 00 06 06 00 04 18 00 02 18 00 50 18 00	•
BLOMETH S AF BLOMETH S AF PLOMETH S AF SPETSAI I GR WOODBRDG ENG	29 06 19 5 29 06 19 5 29 06 19 5 37 16 30 N 52 04 00 N	026 13 35 026 13 35 026 13 35 026 13 35 023 09 00 001 24 00	1634 1634 1634	17 47 45.70 17 48 30.00 17 50 13.00 18 02 12.00 19 30 00.00	019 45 00 * 090 00 00 00 00 00 00 00 00 00	20 00 00 - 68 30 00	
MIL RAD MASS MIL RAD MASS MIL RAD MASS MIL RAD MASS MIL RAD MASS	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N	288 30 28 288 30 28 288 30 28 288 30 28 288 30 28	155 155 155 155 155	20 22 50.00 20 25 25.00 20 28 29.00 21 57 06.00 21 58 44.00	350 30 00 042 18 00 109 48 00 254 00 00 210 24 00	06 24 00 20 12 00 06 36 00 17 24 00 13 30 00	1457 830 1490 913 1076
MIL RAD MASS MIYAZAKI J CINCNATI A O ANTFGSTA CHI LAPLAT C ARG	42 37 03 N 31 55 23 N 39 11 29 N 23 39 11 S 34 54 26 S	289 30 26 131 25 24 275 17 24 289 34 03 302 05 30	155 8 270 10	22 00 36.00 22 49 18.00 23 28 05.00 23 45 12.50 23 48 57.70	186 48 00 008 45 00 257 00 00 022 12 00 018 05 17	* - 46 06 00	*
LAPLAT C ARG	34 54 26 S	302 05 30		23 49 30•60	016 55 19	<b>* -</b> 56 12 30	*
616UTA = 611			2 DEC 1			_	
SACMTO E CAL STFD RES CAL ALBUQ B NM ALBUQ A NM TUCSON ARIZ	38 32 55 N 37 24 11 N 35 06 37 N 35 05 03 N 32 13 59 N	237 49 29 253 27 47 253 21 24	152 1667 1520	00 56 34.00 00 56 42.00 00 57 21.00 00 58 11.50 00 59 24.00	241 30 00 016 46 00 017 14 00	# 06 00 00°	370
EL PASO TEX L ALAMOS NM	31 49 41 N 35 52 30 N			01 00 01•00 01 00 05•00		* - 32 10 00	•

STATION	LATITU0E	LONGITUOE EAST	HEIGHT IN METERS	TIME GMT IN HR MIN SEC	AZIMUTH OR RGT ASCEN *	ELEVATION OR DECLINATION*	SLANT RANGE IN KM
			2 OEC 1958	(CONT)			
TUCSON ARIZ L CRUC A NM ELLSWRTH AFB ELLSWRTH AFB JDRL BNK ENG	32 13 59 N 32 19 42 N 44 03 00 N 44 03 00 N 53 14 11 N	249 03 51 253 09 10 257 02 00 257 02 00 357 41 38	227 1186 1000 1000	01 00 53.00 01 06 25.00 02 07 00.00 02 08 00.00 08 02 00.00	204 30 00 018 47 00 * 090 00 00 090 00 00 127 03 00	11 00 00 - 29 00 00 * 45 00 00 40 00 00 20 20 00	600
ADLAID A AUS PERTH AUS MIL RAD MASS MIL RAD MASS MIL RAD MASS	34 55 14 5 32 00 07 5 42 37 03 N 42 37 03 N 42 37 03 N	138 36 14 115 51 10 288 30 28 288 30 28 288 30 28	55 5 155 155 155	10 12 23.00 11 40 24.20 12 25 27.00 12 27 00.00 12 30 29.00	243 00 00 257 54 00 221 30 00 246 06 00 030 48 00	4C 00 00 27 36 00 09 06 00 47 06 00 02 54 00	864 285 1419
MARCH AB CAL STFD RES CAL MIL RAD MASS MIL RAD MASS MIL RAD MASS	33 54 00 N 37 24 11 N 42 37 03 N 42 37 03 N 42 37 03 N	242 45 00 237 49 29 288 30 28 288 30 26 288 30 28	467 152 155 155 155	13 25 00.00 15 23 33.00 18 39 39.00 20 08 29.00 20 10 58.00	182 30 00 300 00 00 040 00 00 350 36 00 047 00 00	42 30 00 84 00 00 - 00 30 00 05 36 00 18 42 00	193 1940 1350 1376
MIL RAD MASS MIL RAD MASS MIL RAD MASS MIL RAD MASS TERRHAUT IND	42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N 39 31 38 N	288 30 28 288 30 28 288 30 28 288 30 28 272 36 10	155 155 155 155 155	20 13 48.00 21 41 51.00 21 42 02.00 21 44 05.00 22 57 44.50	111 24 00 271 42 00 244 30 00 200 18 00 270 00 00	05 12 00 10 48 00 12 48 00 06 06 00 22 00 00	1419 1040 937 1318
AIRCRAFT	30 30 00 N	268 50 00	9146	23 32 00.00	254 00 00	07 30 00	
			3 OEC 1958	6			
ALBUQ S NM CPTWN A S AF STIAGO R CHI MIL RAO MASS MIL 40 MASS	35 03 18 N 33 56 00 S 33 33 42 S 42 37 03 N 42 37 03 N	253 23 30 110 28 37 289 18 48 283 30 28 288 30 28	1618 7 573 155 155	00 40 35.00 02 53 02.60 08 46 00.00 12 00 02.00 12 01 07.00	270 00 CC 010 00 00 320 00 00 213 00 00 213 00 00	04 00 00 15 00 00 15 00 00 02 00 00 09 48 00	1152 6 <b>7</b> 5
MIL RAD MASS JORL BNK ENG WHSD-A-GS NM ALBUG S NM WICHITA KAN	42 37 03 N 53 14 11 N 32 21 28 N 35 03 18 N 37 41 44 N	288 30 28 357 41 38 253 37 47 253 23 30 262 45 19	155 1234 1618 413	12 02 02.00 12 30 40.00 13 28 00.00 13 28 00.00 13 28 53.00	213 12 00 010 00 00 123 00 00 090 00 00 360 00 00	30 36 00 04 30 00 17 00 00 10 30 00 75 00 00	296 1100
WICHITA KAN MIL RAO MASS MIL RAO MASS MIL RAO MASS MIL RAO MASS STFO RES CAL	37 41 44 M 42 37 03 N 42 37 03 N 42 37 03 N 42 37 03 N	262 45 19 288 30 28 236 30 28 233 30 28 288 30 28	413 155 155 155 155	13 28 53.00 13 32 41.00 13 33 21.00 13 33 33.00 13 33 47.00	011 25 33 * 315 00 00 327 18 00 331 12 00 335 48 00	50 06 00 <b>*</b> 00 12 00 00 18 00 <b>*</b> 00 06 00 <b>*</b> 00 12 00	1398 1395 1410 1432
SIFU RES CAL	37 26 00 N	237 50 00	793	14 55 55.00	118 00 00	40 00 00	220

TABULATION OF AIR FORCE SIGHTINGS IN CHRONOLOGICAL SEQUENCE WITHIN A SINGLE PASS 16 May 1958 to 20 May 1958

					TO WAT	20					
HR	MIN	SEC	AZIMUTH	ELEVATION			HR	MIN	SEC	AZIMUTH	ELEVATION
01 01 01	04 04 04		026 36 00 026 52 48 027 07 48 027 41 24 028 08 24	39 58 12 40 02 24 40 09 00 40 17 24 40 30 36			01 01 01 01 01	05 05 05 05	48.00 49.00 50.00 51.00 52.00	059 00 36 059 27 00 060 04 12 060 36 36 061 06 36	47 25 12 47 27 00 47 30 00 47 30 36 47 32 24
01 01 01	04 04 04	43.00 44.00 45.00 46.00 47.00	028 30 00 028 49 48 029 09 36 029 36 36 029 57 36	40 36 00 40 44 24 40 59 24 41 09 00 41 18 36			01 01 01 01 01	05 05 05 05	53.00 54.00 55.00 56.00 57.00	061 40 48 062 15 36 062 42 00 063 31 48 063 59 24	47 34 48 47 34 48 47 34 12 47 33 00 47 40 12
01 01 01 01	04 04 <b>0</b> 4	48.00 49.00 50.00 51.00 52.00	030 21 00 030 45 36 031 08 24 031 34 12 032 03 00	41 27 36 41 36 36 41 49 48 41 55 24 41 59 24			01 01 01 01	05 05 06 06 06	58.00 59.00 00.00 01.00 02.00	064 30 36 065 00 00 065 22 12 065 47 24 066 20 24	47 40 48 47 40 48 47 41 24 47 41 24 47 41 24
01 01 01 01 01		53.00 54.00 55.00 56.00 57.00	032 25 12 032 43 12 033 16 12 033 36 24 034 07 48	42 08 24 42 19 12 42 25 48 42 37 12 42 41 24			01 01 01 01	06 06 06 06	03.00 04.00 05.00 06.00 07.00	066 59 24 067 29 24 067 58 48 068 27 36 068 52 12	47 41 24 47 41 24 47 41 24 47 41 24 47 41 24
01 01 01 01	04	58.00 59.00 00.00 01.00 02.00	034 33 00 034 55 48 035 22 48 035 54 00 036 13 12	42 54 00 43 03 00 43 12 36 43 15 36 43 24 36			01 01 01 01	06	09.00 10.00	069 23 24 069 56 24 070 30 36 070 52 48 071 24 00	47 40 48 47 40 48 47 39 36 47 39 36 47 39 36
01 01 01 01 01	05 05 05 05	03.00 04.00 05.00 06.00 07.00	036 45 36 037 06 00 037 36 36 038 03 36 038 36 00	43 31 12 43 45 00 43 52 48 43 58 12 44 03 36			01 01 01 01	06 06 06	14.00 15.00 16.00	071 57 00 072 25 48 072 58 12 073 21 36 073 55 48	47 39 36 47 39 36 47 38 24 47 35 24 47 31 12
01 01 01 01	05 05 05 05	08.00 09.00 10.00 11.00	039 01 12 039 30 00 039 54 00 040 26 24 040 49 12	44 13 12 44 21 36 44 27 36 44 34 12 44 43 12			01 01 01 01	06 06	19.00 20.00 21.00	074 34 12 075 00 00 075 24 00 076 02 24 076 27 36	47 31 12 47 24 36 47 25 12 47 25 12 47 20 24
01 01 01 01		13.00 14.00 15.00 16.00 17.00	041 19 12 041 42 36 042 18 36 042 55 48 043 09 36	44 54 00 44 53 24 45 02 24 45 16 12 45 28 12			0:	1 06 1 06 1 06	24.00 25.00 26.00	076 58 12 077 24 36 077 57 36 078 33 00 078 50 24	
01 01 01 01	05 05 05	18.00 19.00 20.00 21.00 22.00	043 43 12 044 09 00 044 40 12 045 12 36 045 45 36	45 25 48 45 25 48 45 35 24 45 40 48 45 43 12			0000	1 00 1 00 1 00	5 29.00 6 30.00 6 31.00	079 19 48 079 47 24 080 09 00 080 41 24 081 12 36	46 53 24 46 51 00 46 46 48
01 01 01 01	L 05 L 05 L 05	24.00 25.00 26.00	046 07 12 046 32 24 047 12 00 048 21 00 048 54 00	46 09 00			0	1 0 1 0		081 37 12 082 15 36 082 33 00 083 00 36 083 25 12	46 29 24 46 25 12 47 22 48
0:	1 05 1 05 1 05	29.00 30.00 31.00	048 51 36 049 07 12 049 32 24 050 14 24 050 37 48	46 20 24 46 27 36 46 30 00			0	01 0 01 0	38.00 6 39.00 6 40.00 6 41.00 6 42.00	083 46 48 084 19 48 084 51 00 085 15 36 085 42 36	46 07 48 0 46 03 00 5 45 58 12
0	1 0: 1 0: 1 0: 1 0:	34.00 5 35.00 5 36.00	051 03 36 051 56 24 052 22 48 052 49 48 053 15 0	46 49 48 3 46 44 24 3 46 52 48			(	01 0 01 0	06 43.00 06 44.00 06 45.00 06 46.00 06 47.00	086 06 06 086 33 36 087 00 36 087 28 46 087 51 06	6 45 40 12 6 45 35 24 8 4 <b>5</b> 30 36
0	01 0 01 0 01 0 01 0	5 39.00 5 40.00 5 41.00	053 55 1 054 20 2 054 49 4 055 30 3 055 58 1	4 47 03 00 8 47 08 24 6 47 11 24		•		01 01 01	06 48.00 06 49.00 06 50.00 06 51.00 06 52.00	089 27 0	2 45 17 24 0 45 12 36 0 45 04 12
(	01 0 01 0	5 43.00 15 44.00 15 45.00 15 46.00 15 47.00	057 32 2 057 55 4	6 47 17 24 4 47 20 24 8 47 21 36				01 01 01	06 53.00 06 54.00 06 55.00 06 56.00 06 57.00	090 39 0 091 09 3 0 091 20 2	0 44 44 24 6 44 39 36 4 44 34 12

PATRICK AFB OFT.TR STA. 1.5 LAT. 28 29 33 N LONG. 279 25 27 E HT 0015 M

				16 MAY 58				
HR M	IN SEC	. YSTWALL	ELEVATION		HR MIN	SEC	AZ1MUTH	ELEVATION
01 0 01 0 01 0	66 58.00 66 59.00 7 00.00 7 01.00 7 02.00	092 12 00 092 33 36 092 55 12 093 17 24 094 07 48	44 22 12 44 17 24 44 12 00 44 04 48 43 56 24		01 08 0 01 08 1 01 08 1	9.00 .0.00 .1.00	112 10 12 112 19 12 112 31 12 112 47 24 112 51 00	36 00 36 35 53 24 35 45 00 35 37 48 35 27 00
01 0 01 0	07 03.00 07 04.00 07 05.00 07 06.00 07 07.00	093 57 36 094 23 24 094 42 00 095 10 12 095 29 24	43 48 00 43 45 36 43 36 00 43 24 36 43 22 48		01 08 1 01 08 1 01 08 1	14.00 15.00 16.00	113 06 36 113 21 00 113 31 12 114 00 36 113 58 48	35 17 24 35 10 12 35 01 12 35 00 36 34 49 12
01 0 01 0	07 08.00 07 09.00 07 10.00 07 11.00 07 12.00	095 52 48 096 27 36 096 27 00 096 43 12 097 09 00	43 09 36 42 29 24 42 55 48 42 49 48 42 45 36	·	01 08 01 08 01 08	18.00 19.00 20.00 21.00 22.00	114 13 12 114 21 00 114 31 12 114 42 00 114 48 00	34 36 00 34 31 48 34 22 48 34 22 48 34 18 00
01 01 01	07 13.00 07 14.00 07 15.00 07 16.00 07 17.00	097 30 00 097 50 24 098 09 00 098 31 12 098 43 48	42 35 24 42 27 36 42 24 00 42 17 24 42 00 36		01 08 01 08 01 08	23.00 24.00 25.00 26.00 27.00	115 01 12 115 15 36 115 28 48 115 33 36 115 44 24	34 09 00 34 01 12 33 44 24 33 44 24 33 37 12
01 01 01	07 18.00 07 19.00 07 20.00 07 21.00 07 22.00	099 07 48 099 30 00 099 49 12 100 09 36 100 20 24	42 02 24 41 57 36 41 54 00 41 48 00 41 41 24		01 08 01 08 01 08	28.00 29.00 30.00 31.00 32.00	115 58 12 116 03 00 116 20 24 116 30 00 116 38 24	33 35 24 33 29 24 33 22 12 33 17 24 33 13 48
01 01 01	07 23.00 07 24.00 07 25.00 07 26.00 07 27.00	100 42 36 101 00 36 101 10 48 101 30 36 101 48 00	41 34 48 41 24 00 41 17 24 41 10 48 41 05 24		01 08 01 08 01 08 01 08 01 08	33.00 34.00 35.00 36.00 37.00	116 53 24 117 00 00 117 12 00 117 22 48 117 30 00	33 03 36 32 54 00 32 43 48 32 36 00 32 32 24
01 01	07 28.00 07 29.00 07 30.00 07 31.00 07 32.00	102 01 12 102 21 00 102 39 36 103 01 48 103 16 12	40 56 24 40 48 36 40 42 36 40 33 00 40 25 48		01 08 01 08 01 08 01 08 01 08	38.00 39.00 40.00 41.00 42.00	117 39 36 117 54 36 118 00 00 118 06 00 118 14 24	32 21 00 32 17 24 32 10 48 32 07 12 31 59 24
01 01 01 01 01	07 33.00 07 34.00 07 35.00 07 36.00 07 37.00	103 33 00 103 51 36 104 12 00 104 21 36 104 45 00	40 19 48 40 04 48 39 59 24 39 54 00 39 51 00		01 08 01 08 01 08 01 08 01 08	43.00 44.00 45.00 46.00 47.00	118 26 24 118 36 00 118 43 48 118 52 12 119 00 36	31 51 00 31 45 36 31 39 00 31 27 00 31 19 48
01 01 01 01 01	07 38.00 07 39.00 07 40.00 07 41.00 07 42.00	104 59 24 105 20 24 105 31 12 105 44 24 106 02 24	39 42 36 39 34 12 39 22 12 39 16 12 39 09 00		01 08 01 08 01 08 01 08 01 08	48.00 49.00 50.00 51.00 52.00	119 06 36 119 18 36 119 25 48 119 35 24 119 48 36	31 09 36 31 07 48 30 58 12 30 54 00 30 50 24
01 01 01 01 01	07 43.00 07 44.00 07 45.00 07 46.00 07 47.00	106 16 12 106 36 00 106 48 36 107 04 48 107 20 24	39 03 00 38 55 48 38 49 48 38 42 00 38 36 00		01 08 01 08 01 08 01 08 01 08	53.00 54.00 55.00 56.00 57.00	119 51 36 120 07 48 120 06 36 120 14 24 120 14 24	30 40 48 30 34 12 30 28 12 30 26 24 30 09 00
01 01 01 01	07 48.00 07 49.00 07 50.00 07 51.00 07 52.00	107 52 12 107 49 12 108 00 00 108 24 36 108 37 48	38 07 12		01 08 01 08 01 09 01 09 01 09	58.00 59.00 00.00 01.00 02.00	120 27 36 120 36 36 120 46 48 120 58 12 121 08 24	30 11 24 29 58 12 29 54 00 29 46 48 29 38 24
01 01 01 01	07 54.00 07 55.00 07 56.00	108 52 48 109 06 00 109 13 12 109 30 00 109 50 24	37 39 36 37 31 12 37 24 00		01 09 01 09 01 09 01 09 01 09	03.00 04.00 05.00 06.00 07.00	121 15 36 121 24 36 121 31 12 121 38 24 121 49 48	29 27 00 29 19 12 29 16 12
01 01 01 01	07 59.00 08 00.00 08 01.00	110 25 12 110 42 00	37 06 36 2 36 50 24 3 36 46 48		01 09 01 09 01 09 01 09 01 09		121 55 12 122 02 24 122 06 36 122 14 24 122 22 48	28 55 48 28 52 48 28 43 48 .
01 01 01 01	08 04•00 08 05•00 08 06•00	111 22 12 111 28 48 111 44 24	36 31 12 36 15 36 36 07 48		01 09 01 09 01 09 01 09 01 09	14.00 15.00 16.00	122 30 00 122 35 24 122 43 48 122 54 00 122 58 48	28 22 12 28 18 36 28 11 24

PATRICK AFB OPT TR STA 1.5 LAT 28 29 33 N LONG 279 25 27 E HT 0015 M	PATRICK AFB	OPT.TR STA. 1.5	LAT. 28 29 33 N	LONG. 279 25 27 E	HT 0015 M
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					16 MAY 58					
HR	MIN	SEC	AZIMUTH	ELEVATION		HR	MIN	SEC	AZIMUTH	ELEVATION
01 01 01 01 01	09 09 09	18.00 19.00 20.00 21.00 22.00	123 12 00 123 13 12 123 25 48 123 31 12 123 35 24	27 59 24 27 59 24 27 50 24 27 48 36 27 39 36		01 01	10 10 10	25.00 26.00 27.00 28.00 29.00	129 20 24 129 24 00 129 33 36 129 35 24 129 43 12	21 44 24 21 41 24 21 39 36 21 33 00 21 27 36
01 01 01 01 01	09 09 09	23.00 24.00 25.00 26.00 27.00	123 36 36 123 44 24 123 57 00 124 04 12 124 08 24	27 33 36 27 25 48 27 10 12 27 07 48 27 04 48		01 01 01 01 01	10 10 10	30.00 31.00 32.00 33.00 34.00	129 43 48 129 48 36 129 52 12 129 57 00 130 02 24	21 21 00 21 16 48 21 14 24 21 09 00 21 04 12
01 01 01 01 01	09 09 09 09	28 • 00 29 • 00 30 • 00 31 • 00 32 • 00	124 14 24 124 15 36 124 27 00 124 34 12 124 39 00	26 59 24 26 54 00 26 46 12 26 42 00 26 35 24		01 01 01 01 01	10 10 10 10	35.00 36.00 37.00 38.00 39.00	130 06 00 130 09 36 130 16 48 130 17 24 130 24 36	21 00 36 20 58 12 20 48 00 20 48 36 20 43 12
01 01 01 01 01	09 09 09 09	33.00 34.00 35.00 36.00 37.00	124 45 00 124 50 24 125 02 24 125 05 24 125 07 12	26 34 48 26 25 48 26 25 48 26 14 24 26 05 24		01 01 01 01 01	10 10 10 10	40.00 41.00 42.00 43.00 44.00	130 27 00 130 30 00 130 35 24 130 35 24 130 37 48	20 39 36 20 43 12 20 32 24 20 24 00 20 11 24
01 01 01 01 01	09 09 09 09	38.00 39.00 40.00 41.00 42.00	125 16 12 125 39 36 125 34 12 125 35 24 125 37 48	26 06 00 25 56 24 25 46 48 25 41 24 25 29 24		01 01 01 01	10 10 10 10	45.00 46.00 47.00 48.00 49.00	130 42 36 130 51 00 130 52 48 130 57 36 131 03 00	20 10 48 20 04 48 20 01 48 19 57 36 19 51 00
01 01 01 01	09 09 09 09	43.00 44.00 45.00 46.00 47.00	125 42 36 125 52 12 125 57 00 126 04 48 126 09 00	25 27 00 25 21 00 25 12 36 25 09 36 25 09 36		01 01 01 01	10 10 10 10	50.00 51.00 52.00 53.00 54.00	131 04 48 131 10 48 131 13 12 131 16 12 131 23 24	19 45 36 19 44 24 19 40 12 19 36 00 19 31 12
01 01 01 01	09 09 09 09	48.00 49.00 50.00 51.00 52.00	126 12 00 126 16 48 126 25 12 126 27 36 126 38 24	25 09 00 25 01 48 24 48 36 24 44 24 24 37 48		01 01 01 01		55.00 56.00 57.00 58.00 59.00	131 25 12 131 30 00 131 35 24 131 40 12 131 43 12	19 27 00 19 21 36 19 15 36 19 09 00 19 06 00
01 01 01 01		53.00 54.00 55.00 56.00 57.00	126 39 00 126 44 24 126 50 24 126 58 48 127 01 12	24 30 36 24 24 36 24 18 36 24 13 12 24 10 12		01 01 01 01	11 11 11	00.00 01.00 02.00 03.00 04.00	131 50 24 131 50 24 131 54 00 131 55 48 132 00 00	19 04 12 18 56 24 18 51 00 18 45 00 18 45 00
01 01 01 02	09 10 10	58.00 59.00 00.00 01.00 02.00	127 08 24 127 12 00 127 21 00 127 25 12 127 28 12	23 58 48 23 59 24 23 52 48 23 49 12 23 46 12		01 01 01 01	11 11 11	05.00 06.00 07.00 08.00 09.00	132 03 36 132 04 48 132 11 24 132 12 36 132 18 36	18 41 24 18 39 00 18 32 24 18 30 00 18 21 00
01 01 01	l 10 l 10 l 10	04.00 05.00 06.00	127 38 24 127 41 24 127 47 24 127 51 36 127 57 00			01 01 01 01	11 11 11	11.00 12.00 13.00	132 22 12 132 24 00 132 31 12 132 33 00 132 36 00	18 10 12 18 03 00 17 58 12
0	1 10 1 10 1 10	09.00 10.00 11.00	128 04 48 128 09 00 128 16 48 128 20 24 128 24 00	23 07 12 23 01 48 22 57 00	٠	01	l 11 1 11 1 11	16.00 17.00 18.00	132 43 12 132 43 12 132 43 12 132 46 12 132 47 24	17 48 36 17 46 48 17 42 00
0	1 10 1 10 1 10 1 10	14.00 15.00 16.00	128 29 24 128 32 24 128 34 48 128 39 00 128 46 13	22 43 48 3 22 36 00 22 31 48		0000	1 11 1 11 1 11	21.00 22.00 23.00	132 49 12 132 50 24 132 55 12 133 01 48 133 06 00	17 36 00 2 17 27 36 3 17 22 48
0	01 1: 01 1: 01 1: 01 1:	0 19.00 0 20.00	128 52 44 128 57 0 129 01 4 129 04 1 129 04 4	0 22 15 36 8 22 10 12 2 22 04 12		0	1 1: 1 1: 1 1: 01 1: 01 1:	26.00 1 27.00 1 28.00	133 09 36 133 10 46 133 13 13 133 14 26 133 15 06	8 17 08 24 2 17 05 24 4 17 02 24
	01 1 01 1	0 23 • 00 0 24 • 00	129 06 0 129 19 1				1 1	1 30.00 1 31.00		

		16 MAY 58		
HR MIN SEC	AZIMUTH ELEVATION		HR MIN SEC	AZIMUTH ELEVATION
01 04 00.00	359 12 00 27 04 12		01 05 10.00	019 15 36 40 04 12
01 04 01.00	359 12 00 26 59 24		01 05 11.00	019 52 48 40 05 24
01 04 02.00	359 14 24 26 38 24		01 05 12.00	020 19 48 40 19 48
01 04 03.00	359 18 36 27 46 12		01 05 13.00	020 21 36 40 41 24
01 04 04.00	000 01 48 26 25 48		01 05 14.00	020 49 12 40 43 48
01 04 05.00	000 34 12 26 28 12		01 05 15.00	021 16 48 41 00 36
01 04 06.00	000 42 36 26 33 36		01 05 16.00	021 23 24 41 00 36
01 04 07.00	004 01 12 25 00 36		01 05 17.00	022 01 48 41 18 36
01 04 08.00	005 41 24 26 27 36		01 05 18.00	022 33 36 41 25 12
01 04 09.00	006 02 24 28 37 12		01 05 19.00	022 33 36 41 39 00
01 04 10.00	006 02 24 28 18 36		01 05 20.00	022 59 24 41 49 12
01 04 11.00	006 09 36 28 26 24		01 05 21.00	023 18 00 41 55 12
01 04 12.00	006 10 12 28 28 48		01 05 22.00	023 46 12 42 09 36
01 04 13.00	005 43 48 30 50 24		01 05 23.00	023 56 24 42 21 00
01 04 14.00	005 29 24 30 36 36		01 05 24.00	024 23 24 42 30 00
01 04 15.00	005 39 36 29 25 12		01 05 25.00	024 47 24 42 49 12
01 04 16.00	005 52 12 29 56 24		01 05 26.00	025 17 24 42 55 12
01 04 17.00	005 51 36 30 39 36		01 05 27.00	026 06 36 43 17 24
01 04 18.00	006 00 36 30 39 00		01 05 28.00	026 06 00 43 07 12
01 04 19.00	006 22 12 30 52 12		01 05 29.00	026 37 12 43 33 00
01 04 20.00	006 28 12 31 07 12		01 05 30.00	026 55 12 43 37 12
01 04 21.00	006 50 24 31 01 48		01 05 31.00	027 19 12 43 46 48
01 04 22.00	006 56 24 31 31 48		01 05 32.00	027 49 12 43 54 00
01 04 23.00	007 18 36 31 45 00		01 05 33.00	027 59 24 44 07 12
01 04 24.00	007 31 12 31 30 36		01 05 34.00	028 30 36 44 10 48
01 04 25.00	007 28 12 31 57 36		01 05 35.00	028 48 36 44 25 12
01 04 26.00	008 01 12 31 54 00		01 05 36.00	029 18 00 44 32 24
01 04 27.00	007 47 24 32 22 12		01 05 37.00	029 37 48 44 49 12
01 04 26.00	008 05 00 32 14 24		01 05 38.00	030 09 00 44 54 00
01 04 29.00	008 15 36 32 36 00		01 05 39.00	030 36 36 45 00 00
01 04 30.00	008 36 36 32 32 24		01 05 40.00	031 04 48 45 15 36
01 04 31.00	008 36 36 32 53 24		01 05 41.00	031 31 12 45 25 12
01 04 32.00	008 58 12 32 57 00		01 05 42.00	031 57 36 45 31 48
01 04 33.00	009 05 24 33 09 00		01 05 43.00	032 28 48 45 43 12
01 04 34.00	009 31 12 33 09 00		01 05 44.00	033 01 12 45 53 24
01 04 35.00	009 31 12 33 30 36		01 05 45.00	033 14 24 46 04 48
01 04 36.00	009 49 48 33 42 36		01 05 46.00	033 53 24 46 24 36
01 04 37.00	010 06 36 33 51 36		01 05 47.00	034 38 24 46 21 00
01 04 38.00	010 12 00 34 07 48		01 05 48.00	034 46 12 46 39 00
01 04 39.00	010 42 00 34 07 48		01 05 49.00	035 24 00 46 43 12
01 04 40.00	010 42 00 34 30 36		01 05 50.00	035 46 12 46 54 36
01 04 41.00	011 13 48 34 37 12		01 05 51.00	036 28 12 47 05 24
01 04 42.00	011 13 48 34 44 24		01 05 52.00	037 03 00 47 17 24
01 04 43.00	011 27 36 35 07 12		01 05 53.00	037 43 12 47 22 48
01 04 44.00	011 45 36 35 12 00		01 05 54.00	037 58 12 47 27 00
01 04 45.00	011 56 24 35 16 12		01 05 55.00	038 21 36 47 39 36
01 04 46.00	012 15 36 35 25 12		01 05 56.00	038 39 36 47 39 36
01 04 47.00	012 16 48 35 48 00		01 05 57.00	039 07 12 47 44 24
01 04 48.00	012 35 24 35 44 24		01 05 53.00	039 41 24 47 49 12
01 04 49.00	012 54 36 36 09 36		01 05 59.00	040 15 36 47 55 12
01 04 50.00 01 04 51.00 01 04 52.00 01 04 53.00 01 04 54.00	013 10 48 36 15 00 013 39 36 36 37 12 013 51 36 36 32 24 014 07 12 37 03 00 014 25 12 37 04 48		01 06 00.00 01 06 01.00 01 06 02.00 01 06 03.00 01 06 04.00	040 47 24 48 09 00 041 26 24 48 12 36 042 58 12 48 35 24 042 58 12 48 34 48
01 04 55.00	014 43 12 37 13 48		01 06 05.00	043 24 36 48 49 12
01 04 56.00	015 00 36 37 27 36		01 06 06.00	044 07 48 48 44 24
01 04 57.00	015 18 36 37 41 24		01 06 07.00	044 35 24 49 01 12
01 04 58.00	015 29 24 37 45 36		01 06 08.00	045 25 12 49 09 00
01 04 59.00	016 07 48 38 04 12		01 06 09.00	045 50 24 49 17 24
01 05 00.00 01 05 01.00 01 05 02.00 01 05 03.00 01 05 04.00	016 33 00 38 15 36 016 53 24 38 29 24 017 07 48 38 40 12		01 06 10:00 01 06 11:00 01 06 12:00 01 06 13:00 01 06 14:00	046 29 24 49 25 48 046 55 48 49 31 12 047 33 36 49 42 00 048 15 36 49 44 24 049 07 48 49 39 36
01 05 05*00 01 05 06*00 01 05 07*00 01 05 08*00 01 05 09*00	0 018 03 36 39 21 36 0 018 27 36 39 29 24 0 018 59 24 39 28 48		01 06 15.00 01 06 16.00 01 06 17.00 01 06 18.00 01 06 19.00	051 13 48 50 04 48

		16 MAY 58			
HR MIN SEC	AZIMUTH ELEVATION		HR MIN SEC	AZIMUTH E	LEVATION
01 06 20.00 01 06 21.00 01 06 22.00 01 06 23.00 01 06 24.00	052 17 24 50 12 36 052 55 12 50 24 36 053 24 36 50 22 12 053 59 24 50 21 36 054 31 12 50 30 36		01 07 30.00 01 07 31.00 01 07 32.00 01 07 33.00 01 07 34.00	091 40 48 4 092 22 12 4 092 23 24 4	8 29 24 8 27 36 8 18 36 8 09 00 8 08 24
01 06 25.00 01 06 26.00 01 06 27.00 01 06 28.00 01 06 29.00	054 55 48 50 33 36 055 49 12 50 39 00 056 06 00 50 41 24 056 52 12 50 46 12 057 18 36 50 57 36		01 07 35.00 01 07 36.00 01 07 37.00 01 07 38.00 01 07 39.00	093 47 24 4 094 12 36 4 094 38 24	47 55 12 47 45 36 47 43 48 47 33 00 47 31 48
01 06 30.00 01 06 31.00 01 06 32.00 01 06 33.00 01 06 34.00	057 51 00 50 56 24 C58 25 48 51 03 00 059 C7 12 51 06 36 059 51 00 51 02 24 060 29 24 51 07 48		01 07 40.00 01 07 41.00 01 07 42.00 01 07 43.00 01 07 44.00	095 56 24 096 21 36 096 47 24	47 22 48 47 13 12 47 11 24 47 11 24 46 53 24
01 06 35.00 01 06 36.00 01 06 37.00 01 06 38.00 01 06 39.00	061 13 48 51 12 36 061 39 00 51 12 00 062 21 00 51 16 12 062 56 24 51 16 12 063 42 36 51 15 36		01 07 45.00 01 07 46.60 01 07 47.00 01 07 48.00 01 07 49.00	098 11 24 098 27 36 098 51 00	46 53 24 46 46 48 46 35 24 46 29 24 46 27 20
01 06 40.00 01 06 41.00 01 06 42.00 01 06 43.00 01 06 44.00	064 10 48 51 19 12 064 54 36 51 15 36 065 24 36 51 15 36 066 09 00 51 18 36 066 49 12 51 18 36		01 07 50.00 01 07 51.00 01 07 52.00 01 07 53.00 01 07 54.00	099 39 36 099 59 24 100 32 24 100 55 48 101 17 24	46 09 36 46 06 00 45 56 24 45 41 24 45 44 24
01 06 45.60 01 06 46.00 01 06 47.00 01 06 48.00 01 06 49.00	067 11 24 51 16 12 067 47 24 51 16 12 068 28 12 51 16 12 068 58 12 51 16 12 069 34 48 51 13 12		01 07 55.00 01 07 56.00 01 07 57.00 01 07 58.00 01 07 59.00	101 49 12 101 53 24 102 24 36 102 44 24 102 55 12	45 40 48 45 24 00 45 16 48 45 06 36 45 01 48
01 06 50.00 01 06 51.00 01 06 52.00 01 06 53.00 01 06 54.00	070 36 36 50 55 12 071 08 24 51 11 24 071 43 12 51 04 12 072 04 48 51 10 12 072 35 24 51 06 36		01 08 00.00 01 08 01.00 01 08 02.00 01 08 03.00 01 08 04.00	103 30 00 103 47 24 104 10 12 104 38 24 104 51 36	44 52 12 44 37 48 44 37 48 44 37 48 44 37 48
01 06 55.00 01 06 56.00 01 06 57.00 01 06 58.00 01 06 59.00	073 03 36 51 06 36 073 37 12 51 10 12 074 24 36 50 57 36 074 54 36 51 04 12 075 28 12 51 01 12		01 08 05.00 01 08 06.00 01 08 07.00 01 08 08.00 01 08 09.00	105 02 24 105 04 12 105 23 24 105 57 00 106 20 24	44 33 36 44 10 12 43 47 24 43 36 36 43 30 00
01 07 06.00 01 07 01.00 01 07 02.00 01 07 03.00 01 07 04.00	076 04 48 50 51 36 076 42 00 50 52 12 076 54 00 50 51 36 077 35 24 50 46 12 078 02 24 50 28 48		01 08 10.00 01 08 11.00 01 08 12.00 01 08 13.00 01 08 14.00	106 34 48 106 57 00 107 17 24 107 33 36 107 43 12	43 06 00 43 13 12 43 21 36 42 55 12 43 03 36
01 07 05.00 01 67 06.00 01 07 07.00 01 07 08.00 01 07 09.00	078 40 12 50 38 24 079 31 12 50 30 36 079 50 24 50 28 12 080 17 24 50 23 24 080 46 48 50 21 00		01 08 15.00 01 08 16.00 01 08 17.00 01 08 18.00 01 08 19.00	108 05 24 108 24 36 108 35 24 108 52 48 109 07 48	42 57 36 42 42 00 42 35 24 42 29 24 43 22 48
01 07 10.00 01 07 11.00 01 07 12.00 01 07 13.00 01 07 14.00	081 28 48 50 21 00 082 01 12 50 12 36 082 10 12 49 40 12 083 11 24 49 49 12 083 45 36 49 57 00		01 08 20.00 01 08 21.00 01 08 22.00 01 08 23.00 01 08 24.00	109 31 12 109 37 12 110 02 24 110 13 12 110 31 12	42 18 36 42 00 36 41 51 00 41 43 12 41 36 00
01 07 15.00 01 07 16.00 01 07 17.00 01 07 18.00 01 07 19.00	084 26 24 49 44 24 084 37 12 49 39 00 085 05 24 49 41 24 085 47 24 49 38 24 086 13 12 49 34 12		01 08 25.00 01 08 26.00 01 08 27.00 01 08 28.00 01 08 29.00	110 47 24 111 02 24 111 19 12 111 37 12 112 00 36	41 34 12 41 30 36 41 16 12 41 10 12 41 00 36
01 07 20•00 01 07 21•00 01 07 22•00 01 07 23•00 01 07 24•00	087 08 24 49 25 48 087 49 12 49 11 24 088 06 00 49 17 24		01 08 30.00 01 08 31.00 01 08 32.00 01 08 33.00 01 08 34.00		40 39 00 40 51 00 40 45 36 40 24 00 40 12 00
01 07 25.00 01 07 26.00 01 07 27.00 01 07 28.00 01 07 29.00	089 46 48 48 52 48 089 52 48 48 58 48 090 23 24 48 44 24		01 08 35.00 01 08 36.00 01 08 37.00 01 08 38.00 01 08 39.00	113 36 36 113 37 48 113 39 36	40 07 12 39 52 48 39 42 36 39 48 00 39 42 36

					10 AM 30					
HR .	MIN	SEC	AZIMUTH	ELEVATION		HR	MIN	SEC	AZIMUTH	ELEVATION
01 01 01	08 08 <b>0</b> 8	40.00 41.00 42.00 43.00 44.00	114 22 48 114 29 24 114 46 12 115 02 24 115 10 48	39 25 48 39 14 24 39 12 36 38 57 36 38 49 12		01 01 01 01 01	09 09 09 09	50.00 51.00 52.00 53.00 54.00	126 03 36 126 16 12 126 28 12 126 40 12 126 55 12	30 43 48 30 39 36 30 38 24 30 25 48 30 21 00
01 01 01 01 01	08 08 08 08	45.00 46.00 47.00 48.00 49.00	115 29 24 115 48 36 116 14 24 116 13 12 116 32 24	38 44 24 38 36 36 38 25 12 38 21 00 38 06 00		01 01 01 01 01	09 09 09 09	55.00 56.00 57.00 58.00 59.00	127 23 24 127 09 36 127 09 36 127 11 24 127 12 00	29 27 36 30 14 24 29 58 12 29 44 24 29 14 24
01 01 01 01 01	08 08 08 08	50.00 51.00 52.00 53.00 54.00	116 46 12 116 46 12 117 05 24 117 12 00 117 24 36	38 22 12 38 07 12 38 10 12 37 46 12 37 41 24		01 01 01 01	10 10 10 10	00.00 01.00 02.00 03.00 04.00	127 21 00 127 21 36 128 10 12 128 07 12 129 34 12	29 00 36 29 00 36 29 01 12 28 04 12 32 03 36
01 01 01 01	08 08 08 08	55.00 56.00 57.00 58.00 59.00	117 27 00 117 29 24 117 41 24 117 46 12 116 12 36	37 09 00 37 18 36 36 48 00 36 59 24 36 51 00		01 01 01 01	10 10 10 10	05.00 06.00 07.00 08.00 09.00	129 26 24 129 26 24 129 26 24 129 26 24 129 26 24	31 19 48 31 27 36 31 09 36 30 52 12 31 07 48
01 01 01 01 01	09 09 09 09	00.00 01.00 02.00 03.00 04.00	118 15 00 118 30 36 118 51 36 119 05 24 119 20 24	36 55 12 36 39 36 36 37 12 36 19 12 36 19 12		01 01 01 01	10 10 10 10	10.00 11.00 12.00 13.00 14.00	129 24 00 129 08 24 129 08 24 129 08 24 129 18 00	32 15 00 31 03 00 30 55 12 30 48 00 30 40 48
01 01 01 01 01	09 09 09 09	05.00 06.00 07.00 08.00 09.00	119 34 12 119 47 24 120 08 24 120 27 36 120 26 24	36 06 00 36 04 12 35 55 12 35 43 12 35 47 24		01 01 01 01	10	18.00	129 24 36 129 24 36 129 24 36 129 49 12 130 27 36	30 16 48 30 06 36 29 55 48 29 52 12 29 24 00
01 01 01 01 01	09 09 09 69	10.00 11.00 12.00 13.00 14.00	120 34 48 120 45 36 120 51 36 120 53 24 121 21 00	35 29 24 35 36 00 35 28 12 35 12 36 35 07 12		01 01 01 01	10 10 10	21.00 22.00 23.00	130 28 12 130 28 12 130 33 36 130 35 24 130 39 00	29 14 24 28 55 48 28 42 36 28 04 12 27 40 48
01 01 01 01		15.00 16.00 17.00 18.00 19.00	121 16 12 121 32 24 121 38 24 121 45 00 121 55 12	34 54 00 34 48 00 34 41 24 34 41 24 34 27 36	•	01 01 01 01	10	26.00 27.00 28.00	130 39 36 131 24 36 132 23 24 132 58 48 132 57 36	27 01 48 25 54 00 25 31 12 25 25 48 25 10 48
01 01 01 01	09	21.00 22.00 23.00	122 03 36 122 12 36 122 24 36 122 35 24 122 42 36	34 21 00 34 11 24 34 11 24 33 58 48 33 54 00		0: 0: 0:	1 10	31.00 32.00 33.00	133 06 00 133 06 00 133 23 24 133 48 36 133 52 12	25 18 36 25 12 00 23 06 00 21 34 48 18 41 24
01 01 01 01	1 09	26.00 27.00 28.00	122 55 48 122 59 24 123 16 12 123 27 00 123 36 00			0	1 10 1 10 1 10	36.00 37.00 38.00	134 22 48 134 35 24 135 19 48 135 47 24 135 56 46	22 46 48 23 06 36
	1 0° 1 0° 1 0°	9 31.00 9 32.00 9 33.00	123 51 36 123 54 36 124 00 36 124 06 36 124 13 12	33 06 00 33 03 36 32 54 00		0		0 41.00 0 42.00 0 43.00	135 57 36 135 49 12 135 48 36 135 37 12 135 42 36	23 48 36 24 22 12 23 59 24
0 0 0	1 0 1 0 1 0	9 36.00 9 37.00 9 38.00	124 26 24 124 26 24 124 32 24 124 41 24 124 51 36	32 24 00 32 13 12 32 13 12		0		0 46.00	135 44 24 135 52 12 136 21 36 136 20 24 136 32 24	23 26 24 25 31 12 25 24 00
0		9 41.00	124 55 44 125 08 24 125 15 06 125 21 06 125 21 36	4 31 53 24 0 31 53 24 0 31 45 00		0	01 1	0 50.00 0 51.00 0 52.00 0 53.00 10 54.00	136 46 48 136 57 36 137 22 48 137 36 00 137 52 48	5 25 15 36 8 25 15 00 0 25 18 36
0	01 0 01 0	9 45.00 9 46.00 9 47.00 9 48.00 9 49.00	125 39 3 125 46 1 126 00 3 126 05 2 126 03 0	2 31 22 12 6 31 06 00 4 30 49 12		. !	01 1 01 1	55.00 10 56.00 10 57.00 10 58.00 10 59.00	138 05 2 138 22 4 139 11 2 140 06 0 140 47 2	8 25 18 36 4 25 09 36 0 25 09 36

PATRICK AFB	OPT+TR STA+ 3+2	LAT. 26 36 59 N	LONG. 280 38 23 E	HT 0016 M

HR	MIN	SEC	AZIMUTH	ELFVATION	HR	MIN	SEC	AZIMUTH	ELEVATION
01	11	00+00	140 00 00	25 09 00	01	11	38.00	146 36 00	19 04 48
01	11	01.00	141 30 36	25 09 00	01	11	39.00	146 32 24	19 04 48
01	11	02.00	141 37 12	25 09 00	01	11	40.00	146 17 24	17 15 00
01	īī	03.00	141 43 12	25 06 36	01	11	41.00	144 36 36	18 35 24
01	īī	04.00	141 47 24	25 01 48	01	11	42.00	143 48 36	19 10 48
			141 49 12	24 38 24	01	11	43.00	142 58 48	19 55 12
01	11 11	05 • 00 06 • 00	141 49 12	24 30 24 24 31 12	01	11	44.00	142 36 00	20 33 36
01	11	07.00	141 49 12	24 31 12	01	ii	45.00	142 27 00	21 03 36
01 01	11	00 • 80	141 49 12	24 30 00	01	îî	46.00	142 08 24	21 39 36
01	11	09.00	141 49 48	24 25 12	01	îî	47.00	141 58 12	21 56 48
01	11	10.00	141 53 24	23 15 36	01	11	48.00	141 53 24	22 12 36
01	11	11.00	142 01 12	22 59 24	01	îî	49.00	141 49 12	22 29 24
01	11	12.00	142 06 00	23 06 00	01	îî	50.00	141 43 48	22 49 12
01	îî	13.00	142 04 12	23 01 12	01	11	51.00	141 32 24	22 58 12
01	îî	14.00	142 06 00	22 26 24	01	11	52.00	141 16 12	23 15 00
01	11	15.00	142 08 24	22 13 48	01	11	53.00	141 07 12	23 10 12
01	11	16.00	142 14 24	22 13 48	01	11	54.00	141 01 12	23 08 24
01	11	17.00	142 15 00	22 07 12	01	îî	55.00	140 00 36	23 06 24
01	11	18.00	142 16 48	22 06 00	01	îî	56.00	141 04 12	23 03 36
01	11	19.00	143 09 36	22 06 00	01	11	57.00	141 04 12	23 03 36
01	11	17400	143 07 30	22 00 00	01		37800	141 04 12	25 05 50
01	11	20.00	145 26 24	22 09 00	01	11	58.00	141 04 12	23 03 36
01	11	21.00	146 07 12	20 31 48	01	11	59.00	141 04 12	23 03 36
01	11	22.00	146 04 12	18 37 12	01	12	00.00	141 04 12	23 03 36
01	11	23.00	146 07 12	18 42 36	01	12	01.00	141 04 12	23 03 36
01	11	24.00	146 06 36	18 57 36	01	12	02.00	141 04 12	23 C3 36
01	11	25 • 00	146 06 36	18 51 36	01	12	03.00	141 04 12	23 09 00
01	11	26.00	146 21 36	19 04 48	01		04.00	141 01 48	22 48 36
01	îî	27.00	146 21 36	18 56 24	01		05.00	141 01 48	22 28 12
01	îî	28.00	146 27 36	18 00 36	01			141 01 12	21 52 12
01	11	29.00	146 27 36	18 44 24	01			141 01 12	21 52 12
01	11	29000	146 27 36	10 44 24	01	. 12	01.00	141 01 12	21 72 12
01	11	30.00	146 27 36	18 42 36	01			141 01 48	21 52 12
01	11	31.00	146 27 36	18 37 12	01			141 08 24	21 19 12
01	11	32.00	146 27 36	18 40 48	01			141 02 24	21 42 36
01	11	33.00	146 30 00	18 49 48	01			141 02 24	21 36 36
01	11	34.00	146 30 36	19 19 12	01	1 12	12.00	141 02 24	21 36 36
01	11	35.00	146 38 24	19 01 48	01		13.00	141 03 00	21 38 24
01		36.00	146 41 24	19 02 24	0;			141 03 00	21 39 00
01	11	37.00	146 41 24	19 02 24	0:	1 12	15.00	141 06 36	21 37 12

	PA	TRICK AFB	т-	HE0	D• 5	STA	1.3		LA	T •	28	16	17	N	LONG.	278	23 37 €	нт	00	05 M			
										1	6 M	AY	58										
HR	MIN	SEC	AZI	MUT	н	ELE	VAT	ION							нR	MIN	SEC	AZI	MUT	н	ELE	VAT	ION
01	03	49.00	011	57	00	33	00	36							01	04	23.00	021	02	24	36	27	36
01	03	50.00	011	57	00		52								01	04	24.00	021	11	24		43	
01	03	51.00	011	56	24	34	13	12							01	04	25.00	021	28	48	36	52	48
01	03	52 • 00	011	57	00	34	13	12							01	04	26.00	021	57	00	37	03	36
01	03	53.00	011	57	36	33	30	00							01	04	28.00	022	24	36	37	22	12
01	03	54.00	012	00	00	32	36	00							01	04	30.00	023	00	00	37	43	48
01	03	56.00	013	33	36	31	57	00							01	04	31.00	023	27	36	37	58	48
01	03	57.00	013	33	36	32	01	48							01	04	34.00	024				23	
01	03	58 • 00	013				10								01	04	35.00	024				31	
01	03	59.00	014	21	00	32	16	48							01	04	36.00	025	09	00	38	42	36
01	04	00.00	014				34								01		38.00	026				02	
01	04	01.00	014				42								01	04	39.00	026				80	
01	04	02.00	014				52								01	04	40.00	026				19	
01	04	04.00	015				12								01	04	42.00	027				39	
01	04	07.00	015	22	48	33	43	48							01	04	43.00	027	48	36	39	48	36
01	04	10.00	017				15								01			028				58	
01	04	11.00	017				28								01				38			09	
01	04	13.00	017					24							01		46.00		51			19	
01	04	16.00	018					36							01				18			28	
01	04	17.00	018	54	36	35	27	36							01	04	48.00	029	43	12	40	34	48
01	04	18.00			00			24							01					48		45	
01	04	20.00	020	0.0	00	36	0.2	24							01					48			24
01		21.00	020	15	00	36	12	00							01					48 -			00
01	. 04	22.00	020	36	00	36	21	. 00							01	04	54.00	03	00	36	41	. 31	12

				16 MAY 58				
HR M	IN SEC	AZIMUTH	ELEVATION		HR MIN	SEC	AZIMUTH	ELEVATION
01 0 01 0	55.00 04.57.00 04.59.00 05.02.00 05.03.00	032 36 00 033 06 36 034 18 36 035 24 36 035 55 12	41 40 12 41 56 24 42 15 36 42 42 00 42 52 48		01 06 01 06 01 06 01 06 01 06	16.00 17.00 19.00 21.00 22.00	071 49 12 072 22 48 073 28 12 074 05 24 074 39 00	46 53 24 46 51 00 46 43 48 46 43 48 46 40 12
01 0 01 0	05 04•00 05 05•00 05 07•00 05 08•00 05 09•00	036 10 12 036 34 12 037 28 48 037 52 12 038 26 24	43 03 36 43 19 12 43 18 00 43 27 36 43 34 12		01 06 01 06 01 06 01 06 01 06	23.00 24.00 25.00 28.00 29.00	075 19 48 075 48 36 076 18 00 077 19 48 077 42 00	46 38 24 46 37 12 46 34 12 46 18 36 46 16 48
01 01 01	05 10.00 05 12.00 05 13.00 05 14.00 05 15.00	038 58 48 039 52 12 040 23 24 040 49 48 C41 13 48	43 40 12 43 55 12 44 01 12 44 10 48 44 14 24		01 06 01 06 01 06 01 06 01 06	31.00 32.00 33.00	078 16 48 078 52 48 079 28 48 090 04 48 080 27 36	46 12 36 46 12 36 46 10 12 46 04 48 46 03 00
01 01 01	05 17.00 05 18.00 05 19.00 05 20.00 05 21.00	042 16 48 042 37 12 043 11 24 043 37 12 043 54 36	44 28 12 44 31 48 44 42 00 44 48 00 44 54 36		01 06 01 06 01 06 01 06	38.00 40.00 41.00	080 55 48 082 14 24 083 04 48 083 35 24 084 08 24	45 57 00 45 44 24 45 34 48 45 29 24 45 24 36
01 01 01	05 22.00 05 23.00 05 24.00 05 25.00 05 26.00	044 15 00 044 43 48 045 22 12 046 07 48 046 32 24	45 01 12 45 10 12 45 25 12 45 39 00 45 40 48		01 06 01 06 01 06 01 06	44.00 47.00 48.00	084 38 24 084 58 48 086 15 00 086 34 12 088 15 36	45 23 24 45 19 12 45 00 00 44 54 36 44 33 36
01	05 27.00 05 28.00 05 29.00 05 31.00 05 32.00	046 46 12 047 19 48 047 58 48 048 58 12 049 31 12	45 26 24 45 36 00 45 38 24 45 49 48 45 55 12		01 00 01 00 01 00 01 00	5 54.00 5 55.00 5 56.00	088 43 48 089 02 24 089 31 12 089 54 00 090 16 12	44 30 00 44 23 24 44 18 00 44 10 12 44 06 00
01 01 01 01	05 33.00 05 34.00 05 35.00 05 36.00 05 37.00	049 58 12 050 36 00 050 49 12 051 05 24 051 52 12	45 58 12 46 03 00 46 07 48 46 11 24 46 16 12		01 00 01 00 01 00 01 0	6 59.00 7 00.00 7 01.00	090 34 48 090 57 36 091 19 12 091 45 36 092 07 48	44 00 00 43 52 48 43 46 12 43 39 00 43 34 12
01 01 01 01 01	05 38.00 05 39.00 05 40.00 05 41.00 05 42.00	052 33 36 052 58 12 053 35 24 054 10 12 054 34 48	46 19 12 46 24 00 46 30 00 46 40 12 46 33 36		01 0 01 0 01 0 01 0	7 04.00 7 06.00 7 07.00	092 31 12 092 52 12 093 35 24 093 55 12 094 13 48	43 28 12 43 21 36 43 06 00 42 58 48 42 55 12
01 01 01 01	05 43.00 05 44.00 05 45.00 05 46.00 05 47.00	055 04 48 055 37 48 056 04 48 056 35 24 057 10 12	46 34 12 46 39 00 46 41 24 46 44 24 46 48 36		01 0 01 0 01 0	7 09.00 7 12.00 7 15.00 7 16.00 7 17.00	094 35 24 095 42 00 096 43 48 097 04 12 097 25 12	42 49 12 42 28 12 42 10 12 42 01 12 41 54 36
01 01 01 01 01	05 49.00 05 50.00 05 51.00 05 52.00 05 53.00	058 12 36 058 39 00 059 11 24 059 37 48 060 20 24	46 53 24 46 56 24 46 58 12		01 0 01 0	18.00 17 19.00 17 21.00 17 22.00 17 24.00	097 45 36 098 05 24 098 37 48 099 01 12 099 36 36	41 49 48 41 43 12 41 26 24 41 20 24 41 04 48
01 01 01 01	05 55.00 05 56.00 05 57.00	060 48 36 051 23 24 061 43 48 062 18 36 062 40 13	47 01 12 47 03 00 47 06 36		01 ( .01 (	25.00 07 26.00 07 27.00 07 28.00 07 29.00	099 54 36 100 15 36 100 34 48 100 54 00 101 16 48	40 58 12 40 51 36 40 44 24 40 39 00 40 30 36
01 01 01 01	06 00.00 06 01.00 06 03.00	063 22 1: 063 53 2: 054 25 4: 055 18 0: 065 39 3	4 47 03 36 8 47 05 24 0 47 06 00		01 01 01	07 30.00 07 31.00 07 32.00 07 33.00 07 34.00	101 24 36 101 44 24 101 55 12 102 16 48 102 32 24	40 15 36 40 08 24 39 58 48
01 01 01 01	06 06•00 06 07•00 06 08•00	067 49 1	2 47 07 12 0 47 07 12 2 47 07 12		01 01 01	07 35.00 07 36.00 07 37.00 07 40.00 07 41.00	102 52 12 103 10 12 103 27 00 104 17 24 104 30 00	39 39 36 39 31 12 39 10 12
01 01 01 01	1 06 11•00 1 06 12•00 1 06 13•00	069 28 1 069 55 1 070 25 4	2 47 04 48 2 47 01 48 8 46 58 48	. 5	01 01	07 42.00 07 43.00 07 44.00 07 45.00 07 46.00	105 06 00 105 25 48 105 36 00	38 46 12 38 40 12 38 34 48

PATRICK AFB THEOD. STA. 1.3 LAT. 28 16 17 N LONG. 278 23 37 E HT 0005 M

					20 (1)-1 30					
HR	MIN	SEC	AZIMUTH	ELEVATION		HR	MIN	SEC	AZIMUTH	ELEVATION
01 01 01 01	07 07 07	47.00 49.00 50.00 51.00 53.00	106 06 00 106 38 24 106 52 48 107 10 12 107 49 48	38 18 00 38 03 00 37 54 36 37 48 00 37 38 24		01 01 01 01 01	09 09 09 09	17.00 18.00 19.00 20.00 21.00	122 13 48 122 20 24 122 27 00 122 31 48 122 34 48	27 50 24 27 45 00 27 39 36 27 33 00 27 28 12
01 01 01 01	07 07 07	55.00 56.00 57.00 58.00 59.00	108 04 12 108 14 24 108 30 00 108 46 12 109 04 12	37 18 36 37 09 36 37 02 24 36 55 48 36 48 36		01 01 01 01 01	09 09 09 09	22.00 23.00 24.00 25.00 26.00	122 43 48 122 53 24 123 02 24 123 07 48 123 12 36	27 21 36 27 15 00 27 09 36 27 01 48 26 55 12
01 01 01 01	08	00.00 03.00 04.00 05.00 07.00	109 14 24 109 55 48 110 09 00 110 22 12 110 48 00	36 42 36 36 20 24 36 12 36 36 04 48 35 51 00		01 01 01 01	09 09 09 09	27.00 28.00 29.00 32.00 33.00	123 20 24 123 28 12 123 51 36 123 54 00 124 04 12	26 48 36 26 43 12 26 25 12 26 19 12 26 12 36
01 01 01 01	08 08 08 08	08.00 09.00 10.00 11.00 13.00	110 59 24 111 15 36 111 27 00 111 39 36 112 00 00	35 41 24 35 34 12 35 27 00 35 19 48 35 05 24		01 01 01 01	09 09 09 09	34.00 35.00 36.00 37.00 38.00	124 06 00 124 10 48 124 15 00 124 27 36 124 31 48	26 06 00 26 01 12 25 55 48 25 49 48 25 45 36
01 01 01 01 01	08 08 08 08	14.00 15.00 16.00 18.00 20.00	112 15 00 112 30 00 112 40 48 113 02 24 113 25 48	34 58 12 34 51 00 34 42 36 34 28 48 34 15 36		01 01 01 01 01	09	40.00 41.00 42.00 43.00 45.00	124 42 00 124 46 12 124 49 48 125 04 12 125 10 48	25 31 48 25 24 00 25 18 00 25 13 48 25 05 24
01 01 01 01	08 08 08 08	22.00 24.00 25.00 26.00 27.00	113 48 36 114 15 00 114 22 12 114 32 24 114 45 00	34 01 48 33 46 12 33 40 12 33 34 12 33 25 12		01 01 01 01	09 09	49.00 50.00	125 12 00 125 20 24 125 41 24 125 44 24 125 49 12	25 00 00 24 52 12 24 42 36 24 36 36 24 29 24
01 01 01 01	08 08 08 08	28.00 29.00 30.00 32.00 34.00	114 53 24 115 06 36 115 20 24 115 42 00 115 58 12	33 18 36 33 10 12 33 03 00 32 49 12 32 31 48		01 01 01 01 01	09 09 09	53.00 54.00 55.00	125 59 24 126 09 00 126 09 00 126 08 24 126 22 48	24 24 36 24 20 24 24 13 48 24 05 24 23 57 36
01 01 01 01	08	35.00 36.00 37.00 38.00 39.00	116 09 36 116 20 24 116 28 12 116 37 48 116 49 12	32 27 36 32 22 12 32 15 36 32 08 24 32 02 24		01 01 01 01	10	59.00 00.00 01.00	126 29 24 126 34 48 126 40 12 126 43 12 126 46 12	23 50 24 23 44 24 23 40 12 23 34 12 23 27 36
01 01 01 01	80 80 80	40.00 41.00 42.00 45.00 49.00	116 58 48 117 08 24 117 21 36 117 45 36 118 27 36	31 55 12 31 48 00 31 40 48 31 17 24 30 52 48		01	1 10 1 10	04.00 05.00 06.00	126 51 00 126 55 12 127 10 12 127 15 00 127 17 2 •	23 22 48 23 17 24 23 12 00 23 07 48 23 03 36
01 01 01 01	08 08 1 08	50.00 51.00 52.00 53.00 54.00	118 31 12 118 43 12 118 56 24 118 58 48 119 06 36	30 47 24 30 39 00 30 31 48 30 24 00 30 16 12		0000	1 1 1 1 1 1	0 09.00 0 10.00 0 11.00	127 18 00 127 21 36 127 28 12 127 36 00 127 45 36	23 01 12 22 51 00 22 48 36 22 42 00 . 22 36 36
0 0 0 0	1 08 1 08 1 09	57.00	119 14 24 119 31 48 119 39 36 119 56 24 120 04 48	30 00 00 29 53 24 29 39 36		0	1 1 1 1 1 1	0 15.00 0 16.00	127 55 48 127 57 36 127 58 12 128 05 24 128 19 12	
	1 09	03.00 9 04.00 9 05.00	120 13 48 120 25 12 120 28 48 120 31 48 120 46 48	29 19 12 29 13 12 3 29 07 12		0	1 1 1 1	0 20.00 0 21.00 0 22.00 0 23.00 0 24.00	128 24 00 128 27 36 128 33 00 128 37 12 128 40 48	21 49 48 21 42 36 21 39 00
0	1 0° 1 0° 1 0° 1 0° 1 0°	9 08 • 00 9 09 • 00 9 10 • 00	120 55 12 120 59 24 121 04 13 121 13 13 121 23 24	28 48 36 2 28 42 00 2 28 34 48		0	01 1	25.00 0 26.00 10 27.00 10 28.00 10 29.00	128 49 12 128 52 48 128 55 12 129 01 48 129 05 24	21 23 24 21 19 12 21 13 48
0	01 0 01 0 01 0 01 0	9 13.00 9 14.00 9 15.00	122 03 0	4 28 16 12 6 28 09 00 0 28 03 00		(	01 01 01	30.00 10 31.00 10 32.00 10 33.00 10 34.00	129 12 00 129 15 36 129 19 46 129 23 24 129 29 20	21 00 00 3 20 54 00 4 20 50 24

PATRICK AFB	THEOD. STA. 1.3	LAT. 28 16 17 N	LONG. 278 23 37 E	HT 0005 M

HR	MIN	SEC	AZIMUTH	ELEVATION		HR	MIN	SEC	AZIMUTH	ELEVATION .
01	10	35.00	129 33 36	20 39 00		01	11	05.00	131 31 48	18 18 36
01	10	36 • 00	129 37 48	20 33 00		01	11	06.00	131 37 12	18 13 48
01	10	37.00	129 42 00	20 28 48		01	11	07.00	131 42 00	18 09 00
01	10	38.00	129 43 48	20 25 48		01	11	08.00	121 43 12	18 01 48
01	10	39.00	129 45 00	20 19 48		01	11	09.00	131 45 00	17 58 12
01	10	40.00	129 51 36	20 13 48		01	11	10.00	131 46 48	17 54 36
01	10	42 • 00	130 00 00	20 04 48		01	11	11.00	131 48 00	17 51 00
01	10	43 • 00	130 10 12	19 58 48		01	11	12.00	131 49 12	17 47 24
01	10	44.00	130 15 36	19 55 12	•	01	11	13.00	131 51 36	17 44 24
01	10	45 • 00	130 16 12	19 50 24		01	11	14.00	132 11 24	17 39 36
01	10	46.00	130 20 24	19 46 48		01	11	15.00	132 30 00	17 37 12
01	10	47.00	130 25 48	19 40 48		01	11	17.00	132 26 24	17 32 24
01	10	48 • 00	130 31 48	19 37 12		01	11	18.00	132 21 36	17 29 24
01	10	49.00	130 33 36	19 34 12		01	11	19.00	132 19 48	17 25 12
01	10	50 • 00	130 35 24	19 28 48		01	11	20.00	132 22 12	17 21 36
01	10	51+00	130 39 36	19 22 12		91	11	21.00	132 15 36	. 17 19 12
01	10	52 • 00	130 44 24	19 18 00		01	11	22.00	132 10 48	17 06 36
01	10	53 • 00	130 50 24	19 13 12		01	. 11	23.00	132 18 00	17 00 36
01	10	55 + 00	130 52 48	19 01 12		01	11	24.00	132 32 24	16 52 12
01	10	56 • 00	130 54 36	18 52 12		01	. 11	25.00	132 43 48	16 48 36
01	10	57.00	130 57 36	18 51 00		01	11	26.00	132 52 12	16 44 24
01	10	58 • 00	131 06 36	18 48 00		01	11	27.00	132 54 00	16 36 00
01		00.00	131 16 48	18 43 12		01	11	28.00	132 55 12	16 28 48
01		01.00	131 21 00	18 38 24		01		29.00	132 58 12	16 24 00
01		02.00	131 22 48	18 31 12		01		30.00	133 00 00	16 16 48
01	. 11	03.00	131 25 12	18 30 00		0:	1 11	31.00	133 01 48	16 10 12
01	11	04 . 00	131 26 24	18 23 24						

PATRICK AFB THEOO. STA. 1.20 LAT. 28 31 29 N LONG. 279 26 21 E HT 0011 M

16 MAY 58

					16 MAY 58					
HR	MIN	SEC	AZIMUTH	ELEVATION		HR	MIN	SEC	AZIMUTH	ELEVATION
01	23	48.00	011 22 12	31 07 12		01	04	23.00	021 06 36	37 15 36
01	03	49.00	011 33 00	31 18 36		01	04	24.00	021 35 24	37 28 12
01	03	50.00	011 49 48	31 28 48		01	04	25.00	021 51 36	37 39 00
01	03	51.00	012 03 36	31 39 00		01	04	26.00	022 00 36	37 49 48
01	03	52.00	012 18 00	31 51 00		01	04	27.00	022 30 00	37 58 12
61	03	53.00	012 33 36	31 58 12		01	04	28.00	022 46 48	38 09 36
01	03	54.00	012 49 48	32 12 00		01	04	29.00	023 10 12	38 17 24
01	03	55.00	013 06 00	32 22 12		01	04	30.00	023 35 24	38 30 00
01	03	56 • 00	013 18 36	32 31 12		01	04	31.00	023 54 00	38 39 00
01	03	57.00	013 34 48	32 43 12		01	04	32.00	024 14 24	38 49 12
01	03	58.00	010 50 24	32 53 24		01	04	33.00	024 39 00	39 00 00
01	03	59.00	014 09 36	32 59 24		01	0 4	34.00	024 57 00	39 08 24
01	04	00.00	014 24 36	33 <b>13</b> 12		01	04	35.00	025 20 24	39 18 36
01	04	01.00	014 39 00	33 25 48		01	04	36.00	025 42 36	39 30 36
01	04	02.00	014 53 24	33 34 12		01	04	37.00	026 02 24	39 40 12
01	04	03.00	015 10 48	33 45 00		01	04	38.00	026 26 24	39 48 36
01		04 • 00	015 27 36	33 55 48		01	04	39.00	026 46 12	39 59 24
01		05 • 00	015 46 48	34 06 00		01	0.4	40400	026 59 24	40 10 12
01		06.00	016 01 12	34 20 24		01	04	41.00	027 28 12	40 19 12
01	04	07.00	016 16 48	34 30 36		01	04	42.00	027 57 36	40 28 48
01	0.4	08.00	016 33 36	34 39 00	•	01	04	43.00	028 18 00	40 39 00
01	04	09.00	016 50 24	34 49 12		01	04	44.00	028 45 36	40 49 12
01	04	10.00	017 10 48	34 58 48		. 01	04	45.00	029 04 48	40 57 00
01	04	11.00	017 28 12	35 08 24		01	04	46.00	029 29 24	41 08 24
01	04	12.00	017 43 12	35 20 24		01	04	47.00	029 57 00	41 14 24
01	04	13.00	017 59 24	35 33 36		01	04		030 21 36	41 24 00
01	. 04	14.00	018 19 48	35 40 48		01		49.00	030 43 12	41 35 24
01	. 04	15.00	018 40 12	35 52 12		01	04	50.00	031 08 24	41 43 12
01	04	16.00	018 58 48	36 04 12		01	04	51.00	031 30 36	41 52 12
01	04	17.00	019 18 36	36 12 00		01	04	52.00	031 54 00	42 03 00
01			019 39 36			01			032 19 48	42 11 24
0.1			019 55 12			01			032 46 48	42 19 12
0		20.00	020 13 48			01			033 14 24	
0			020 31 48			0:			033 39 00	
0:	1 04	22.00	020 52 48	37 06 00		0	04	57.00	034 04 48	42 47 24

		,	0,	20 31 27		2.,,	-0 21 -	111 0011 1	1
				16 MAY 58					
MIN	SEC	AZIMUTH	ELEVATION		HR	MIN	SEC	AZIMUTH	ı

HR M	IN	SEC	AZIMUTH	ELEVATION	HR	MIN	SEC	AZIMUTH	ELEVATION
01 0 01 0 01 0	) 4 ) 5 ) 5	58.00 59.00 00.00 01.00 02.00	034 31 12 034 57 36 035 21 36 035 46 48 036 13 48	42 54 36 43 02 24 43 12 00 43 19 48 43 28 12	01 01 01 01	06 06 06 06	08.00 09.00 10.00 11.00 12.00	069 39 36 070 10 12 070 40 12 071 09 00 071 45 00	47 34 48 47 34 12 47 33 36 47 30 36 47 30 00
01 0 01 0	05 05 05	03.00 04.00 05.00 06.00 07.00	036 42 36 037 10 12 037 38 24 038 06 36 038 30 00	43 34 12 43 43 48 43 52 12 43 58 48 44 08 24	01 01 01 01	06 06 06 05	13.00 14.00 15.00 16.00 17.00	072 14 24 072 42 36 073 11 24 073 45 00 074 13 12	47 27 36 47 25 48 47 21 36 47 19 48 47 18 36
01 0 01 0	05 05 05	08.00 09.00 10.00 11.00 12.00	038 58 48 039 25 48 039 55 48 040 23 24 040 54 36	44 16 12 44 22 12 44 30 00 44 36 36 44 43 48	01 01 01 01	06 06 06 06	18.30 19.00 20.00 21.00 22.00	074 44 24 075 10 48 075 41 24 076 11 24 076 39 00	47 15 36 47 13 12 47 09 36 47 07 48 47 04 48
01 0 01 0	05 05 05	13.00 14.00 15.00 16.00 17.00	041 19 12 041 48 36 042 18 00 042 43 12 043 16 48	44 52 12 45 01 48 45 05 24 45 11 24 45 18 36	01 01 01 01	06	23.00 24.00 25.00 26.00 27.00	077 09 36 077 40 12 078 06 00 078 34 48 079 02 24	47 00 36 46 56 24 46 54 00 46 50 24 46 47 24
01 01 01	05 05 05	18.00 19.00 20.00 21.00 22.00	043 46 48 044 16 48 044 46 48 045 13 48 045 46 12	45 24 00 45 31 48 45 36 00 45 41 24 45 47 24	01 01 01 01	06 06 06	28.00 29.00 30.00 31.00 32.00	079 33 00 080 01 48 059 27 36 080 56 24 081 25 12	46 43 12 46 39 00 46 35 24 46 30 00 46 25 12
01 01 01	05 05 05 05	23.00 24.00 25.00 26.00 27.00	046 12 36 046 45 00 047 13 48 047 44 24 048 13 48	45 52 12 45 59 24 46 06 00 46 12 00 46 13 48	C1 01 01 01	06 06	33.00 34.00 35.00 36.00 37.00	081 51 00 082 19 48 082 45 36 083 14 24 083 42 36	46 22 48 46 19 48 46 13 48 46 09 00 46 04 12
01 01 01	05 05 05 05	28.00 29.00 30.00 31.00 32.00	048 44 24 049 17 24 049 49 48 050 19 12 050 49 12	46 21 36 46 26 24 46 30 36 46 34 12 46 38 24	01 01 01	06 06	38.00 39.00 40.00 41.00 42.00	084 06 36 084 31 48 084 57 36 085 23 24 065 49 48	45 59 24 45 54 00 45 49 48 45 44 24 45 40 12
01 01 01	05 05 05 05 05	33.00 34.00 35.00 36.00 37.00	051 19 48 051 52 48 052 22 12 052 52 12 053 24 00	46 42 00 46 47 24 46 51 36 46 55 12 46 59 24	0:	1 06 1 06 1 06	46.00	086 18 00 035 42 36 086 07 12 087 31 48 087 58 48	45 33 00 45 27 00 45 22 48 45 18 36 45 13 48
01 01 01 01 01	05 05 05 05	38.00 39.00 40.00 41.00 42.00	053 56 24 054 24 36 054 57 36 055 25 48 055 57 36	47 02 24 47 06 00 47 09 00 47 11 24 47 15 00	0 0	1 06 1 06 1 06	49.00 50.00 51.00	088 21 36 085 46 12 083 12 36 089 33 00 089 57 00	45 06 00 45 01 12 44 54 36 44 49 12 44 41 24
01 01 01 01 01	05 05 05 05	43.00 44.00 45.00 46.00 47.00	056 28 12 057 03 36 057 34 48 058 07 12 058 39 36	47 18 00 47 21 00 47 23 24 47 25 48 47 27 36	0 0 0 0	1 06 1 06 1 06	54.00 55.00 56.00	090 21 00 090 45 36 091 09 00 091 33 00 091 55 12	44 30 36 44 24 00 44 18 00
01 01 01 01	05 05 05 05	48.00 49.00 50.00 51.00 52.00	059 11 24 059 42 00 060 14 24 060 45 36 061 18 00	47 30 00 47 30 00 47 32 24 47 34 48 47 35 24	0	1 00	59.00 7 00.00 7 01.00	092 19 12 092 46 12 093 09 00 093 28 48 093 49 12	43 59 24 43 51 36 43 45 36
01 01 01 01 01	05 05 05 05	54.00 55.00 56.00	061 50 24 062 19 12 062 49 48 063 22 48 063 48 00	47 37 12 47 37 12 47 38 24 47 39 00 47 40 12	0	01 0° 01 0° 01 0	7 04.00 7 05.00 7 06.00	094 08 24 094 31 12 094 51 00 095 14 24 095 34 12	43 24 36 43 16 48 43 13 48
01 01 01 01	05 05 06 06	59.00 00.00 01.00	064 28 48 064 57 36 065 28 12 066 03 00 066 37 12	47 39 36 47 39 36 47 39 36 47 40 12 47 40 12	(	01 0 01 0 01 0 01 0	7 09.00 7 10.00 7 11.00	096 01 12 095 18 36 096 39 36 096 59 24 097 21 00	42 52 48 42 45 36 42 39 00
01 01 01 01	06 06	04.00 05.00 06.00	067 06 36 067 33 36 068 06 00 068 34 12 069 10 12	47 39 00 47 37 48 47 37 12	(	01 0	7 13.00 7 14.00 7 15.00 7 16.00 7 17.00	097 43 44 098 01 12 098 23 24 098 39 36 099 00 0	2 42 18 00 4 42 10 48 6 42 04 12

PATRICK AFB THEOD. STA. 1.20 LAT. 28 31 29 N LONG. 279 26 21 E HT 0011 M

HR MIN SEC	AZIMUTH ELEVATION	н	R MIN	SEC	AZIMUTH	ELEVATION
01 07 18.00 01 07 19.00 01 07 20.00 01 07 21.00 01 07 22.00	099 19 12 41 49 12 099 36 36 41 38 24 099 57 00 41 33 00 100 15 00 41 26 24 100 34 48 41 18 00	0 0 0 0 0	1 08 1 08 1 08	29.00 30.00 31.00 32.00 33.00	116 11 24 116 19 12 116 30 00 116 42 36 116 51 00	33 02 24 32 55 12 32 51 00 32 43 12 32 34 12
01 07 23*00 01 07 24*00 01 07 25*00 01 07 26*00 01 07 27*00	100 54 00 41 11 24 101 12 36 41 04 12 101 30 36 40 58 12 101 46 48 40 51 36 102 04 12 40 44 24	. 0 0 0 0	1 C8 1 O8 1 O8	34.00 35.00 36.00 37.00 38.00	117 01 48 117 10 12 117 20 24 117 30 00 117 38 24	32 27 00 32 19 48 32 13 48 32 07 12 31 58 12
01 07 28.00 01 07 29.00 01 07 30.00 01 07 31.00 01 07 32.00	102 22 12 40 35 24 102 40 48 40 28 48 102 55 48 60 20 24 103 15 00 40 11 24 103 35 24 40 03 36	0 0 0	01 08 01 08 01 08 01 08 01 08	39.00 40.00 41.00 42.00 43.00	117 48 36 117 57 36 118 09 00 118 18 00 118 25 48	31 51 36 31 44 24 31 39 00 31 31 12 31 24 00
01 07 33.00 01 07 34.00 01 07 35.00 01 07 36.00 01 07 37.00	103 49 48 39 57 36 104 07 12 39 50 24 104 22 48 39 42 36 104 38 24 39 34 48 104 56 24 39 28 48	0	01 08 01 08 01 08 01 08 01 08	44.00 45.00 46.00 47.00 48.00	118 34 12 118 43 48 118 53 24 119 00 36 119 10 48	31 24 00 31 11 24 31 04 48 30 55 48 30 48 36
01 07 38.00 01 07 39.00 01 07 40.00 01 07 41.00 01 07 42.00	105 09 36 39 20 24 105 22.48 39 10 48 105 43 12 39 04 12 105 59 24 38 58 48 106 16 48 38 50 24	(	01 08 01 08 01 08 01 08 01 08	49.00 50.00 51.00 52.00 53.00	119 19 48 119 28 48 119 36 36 119 46 12 119 53 24	30 40 12 30 38 24 30 36 36 30 24 36 30 18 00
01 07 43*00 01 07 44*00 01 07 45*00 01 07 46*00 01 07 47*00	106 31 48 38 43 12 106 49 12 38 35 24 177 00 36 38 28 12 177 13 46 38 20 24 1 29 24 38 11 24		01 08 01 08 01 08 01 08 01 08	54.00 55.00 56.00 57.00 58.00	120 03 36 120 09 36 120 20 24 120 25 48 120 40 12	30 12 00 30 03 36 29 58 12 29 50 24 29 42 36
01 07 48.00 01 07 49.00 01 07 50.00 01 07 51.00 01 07 52.00	107 45 00 38 02 24 107 58 12 37 57 36 108 18 00 37 51 36 108 30 00 7/ 43 12 108 43 48 37 34 12		01 C8 01 09 01 09 01 09 01 09	59.00 00.00 C1.00 02.00 03.00	120 48 00 120 51 00 120 59 24 121 09 00 121 17 24	29 37 46 29 31 12 29 25 48 29 21 36 29 12 36
01 07 53.00 01 07 54.00 01 07 55.00 01 07 56.00 01 07 57.00	108 58 12 37 27 00 109 09 36 37 19 12 109 23 24 37 11 24 109 36 36 37 04 12 169 52 48 36 57 00		01 09 01 09 01 09 01 09 01 09		121 21 36 121 34 12 121 42 00 121 43 48 121 52 48	29 04 12 28 57 36 28 51 00 28 42 36 28 37 48
01 07 58 00 01 07 59 00 01 08 00 00 01 08 01 00 01 08 02 00	110 04 12 36 49 48 110 19 12 36 42 00 110 33 00 36 35 24 110 47 24 36 27 36 110 58 48 36 19 48		01 09 01 09 01 09 01 09 01 09	10.00 11.00 12.00	122 00 00 122 09 36 122 18 36 122 24 36 122 31 12	28 32 24 26 26 24 28 19 48 28 13 46 28 07 48
01 08 03.00 01 08 04.00 01 08 05.00 01 08 06.00 01 08 07.00	111 10 48 36 10 48 111 21 36 36 03 00 111 36 00 35 56 24 111 49 48 35 50 24 112 02 24 35 43 12		01 09 01 09 01 09 01 09 01 09	15.00 16.00 17.00	122 37 48 122 45 36 122 51 36 123 00 00 123 07 12	27 48 00 27 42 36
01 08 08.00 01 C8 09.00 01 08 10.00 01 08 11.00 01 08 13.00	112 14 24 35 35 24 112 26 24 35 27 00 112 37 48 35 19 48 112 49 48 35 10 48 113 13 48 34 58 12		01 09 01 09 01 09 01 09	20.00 21.00 22.00	123 13 48 123 21 36 123 26 24 123 34 48 123 40 48	27 24 00 27 17 24 27 10 48
01 08 14+00 01 08 15+00 01 08 16+00 01 08 17+00 01 08 18+00	113 37 48 34 45 00 113 52 12 34 37 12 114 04 12 34 28 48		01 0: 01 0: 01 0 01 0 01 0	9 25.00 9 26.00 9 27.00	123 46 12 123 54 36 124 01 46 124 07 46 124 12 36	26 52 12 3 26 46 48 3 26 39 36
01 08 19•00 01 08 20•00 01 08 21•00 01 08 22•00 01 08 23•00	114 31 48 34 05 24 114 43 48 33 58 48 114 56 24 33 52 12		01 0		124 16 1: 124 22 4: 124 36 3: 124 40 4: 124 46 4:	8 26 22 48 6 26 17 24 8 26 11 24
01 08 24.00 01 08 25.00 01 08 26.00 01 08 27.00 01 08 28.00	115 30 00 33 31 48 115 40 12 33 24 36 115 48 36 33 18 00		01 0 01 0	34.00 9 35.00 9 36.00 9 37.00 9 38.00	124 52 1 124 59 2 125 06 3 125 12 0 125 16 4	4 25 53 24 6 25 48 00 0 25 42 00

	P	ATRICK AFE	THEOD. STA. 1	20 LA	T. 28 31 29 N 16 MAY 58	LONG.	279	26 21 E	HT 0011 M	
HR	MIN	<b>s</b> EC	AZIMUTH ELEV	ATION		HR	MIN	SEC	AZIMUTH	ELEVATION
01 01 01 01	09 09 <b>0</b> 9	39.00 40.00 41.00 42.00 43.00	125 22 48 25 3 125 29 24 25 2 125 35 24 25 1 125 42 36 25 1 125 47 24 25 0	4 00 8 00 2 36		01 01 01 01 01	10 10 10 10	33.00 34.00 35.00 36.00 37.00	130 00 36 130 04 12 130 09 00 130 12 36 130 16 48	20 42 00 20 36 36 20 31 12 20 25 48 20 21 00
01 01 01 01	09 09 09	44.00 45.00 46.00 47.00 48.00	125 54 00 25 0 125 59 24 24 5 126 06 00 24 4 126 10 12 24 4 126 16 48 24 3	4 36 9 48 3 12		01 01 01 01 01	10 10 10 10	38.00 39.00 40.00 41.00 42.00	130 22 48 130 25 48 130 30 00 130 34 48 130 39 00	20 16 48 20 12 00 20 07 12 20 02 24 19 58 12
01 01 01 01	09 09 09	49.00 50.00 51.00 52.00 53.00	126 28 12 24 2 126 34 48 24 2 126 40 12 24 1	3 00 7 36 2 12 6 12 0 12		01 01 01 01 01	10	43.00 44.00 45.00 46.00 47.00	130 42 36 130 46 12 130 49 12 130 54 00 130 58 12	19 52 12 19 48 00 19 43 48 19 39 36 19 34 12
	. 09	54.00 55.00 56.00 57.00 58.00	126 55 12 23 5 127 00 36 23 5 127 07 48 23 4	4 48 8 12 4 00 9 48 3 12		01 01 01 01 01	10 10 10	50.00 51.00	131 01 48 131 05 24 131 09 36 131 13 48 131 16 48	19 29 24 19 24 36 19 19 48 19 14 24 19 09 36
0	1 10 1 10 1 10	59.00 00.00 01.00 02.00 03.00	127 22 48 23 3 127 28 12 23 3 127 32 24 23 3	36 36 32 24 26 24 22 12 18 00		01 01 01 01 01	10 10 10	54.00 55.00 56.00	131 21 36 131 24 36 131 29 24 131 34 12 131 35 24	19 C6 OO 19 O2 24 18 57 36 18 51 36 18 46 12
0000	1 10 1 10 1 10	05 • 00 06 • 00 07 • 00	127 48 00 23 127 52 12 22 127 57 00 22	10 48 05 24 59 24 54 00 47 24		01 01 01 01	10 11 11	59.00 00.00 01.00	131 40 48 131 46 12 131 48 36 131 50 24 131 55 12	18 41 24 18 38 24 18 32 24 18 27 00 18 23 24
0	1 10 1 10 1 10 1 10 1 10	10.00 11.00 12.00	128 14 24 22 128 19 12 22 128 22 48 22	43 12 37 48 33 36 27 36 22 12		01 01 01 01	l 11 l 11 l 11	04.00 05.00 06.00	131 58 12 132 01 12 132 04 48 132 09 36 132 13 48	18 20 24 18 15 00 18 10 48 18 06 36 18 01 12
0	01 10 01 10 01 10 01 10	15.00 16.00 17.00	128 38 24 22 128 43 12 22 128 48 36 22	18 00 14 24 09 00 01 48 58 12		0:00	1 11 1 12 1 13	09.00 1 10.00 1 11.00	132 17 24 132 21 36 132 24 00 132 28 12 132 28 48	17 57 36 17 52 48 17 49 12 17 44 24 17 40 12
1	01 10 01 1 01 1 01 1	0 20.00 0 21.00 0 22.00	129 02 24 21 129 06 36 21 129 10 48 21	51 36 45 36 42 00 36 36 31 48		0	1 1 1 1	1 14.00 1 15.00 1 16.00	132 34 12 132 37 12 132 40 48 132 43 48 132 46 48	17 36 00 17 31 12 17 25 48 17 22 12 17 18 00
	01 1 01 1 01 1 01 1 01 1	0 25.00 0 26.00 0 27.00	129 25 48 21 129 30 00 21 129 33 00 21	25 48 21 00 15 36 10 48 05 24		0	01 1 01 1 01 1 01 1	1 19.00 1 20.00 1 21.00	132 51 36 132 55 12 132 57 00 133 00 00 133 06 00	
			129 47 24 20 129 51 36 20	00 00 56 24 52 12 46 48		. (			133 08 24 133 09 36 133 11 24 133 15 00	16 52 12 16 46 48
		PATR1CK	AFB THEOD. STA	1.40	LAT• 28 27 58 16 MAY 58	N LO	NG • 2	279 24 38	E HT 0010	м
	HR	MIN SEC		LEVATION				MIN SEC	AZIMUTH	ELEVATION
	01 01 01	06 19.00 06 20.00 06 21.00 06 22.00 06 23.00	023 45 <b>00</b> 4 024 18 00 4 025 04 48 4	9 54 36 1 03 00 0 54 00 0 58 12 1 06 36		•	01 01 01	06 27.00 06 28.00 06 29.00 06 30.00 06 31.00	027 00 36 027 30 00 027 51 36 028 12 36 028 39 36	0 41 56 24 5 42 10 12 6 42 16 48
									000 00 0	

01 06 27.00 027 00 36 41 49 12
01 06 28.00 027 30 00 41 56 24
01 06 29.00 027 51 36 42 10 12
01 06 30.00 028 12 36 42 16 48
01 06 31.00 028 39 36 42 27 36

01 06 32.00 029 00 00 42 37 48
01 06 33.00 029 34 12 42 49 12
01 06 34.00 029 56 24 43 00 00

06 24•00 06 25•00 06 26•00 025 49 48 026 12 36 026 33 36 41 16 12 41 26 24 41 37 48

					10 MAT 30					
HR	MIN	SEC	AZ IMUTH	ELEVATION		HR	MIN	SEC	AZIMUTH	ELEVATION
01 01 01	06 06 06	35.00 36.00 37.00 38.00 39.00	030 16 12 030 42 36 031 03 00 031 30 36 031 58 12	43 06 36 43 17 24 43 25 48 43 35 24 43 45 00		01 01 01 01 01	07 07 07 07 07	49.00 50.00 51.00 52.00 53.00	068 13 48 058 41 24 069 19 12 069 48 00 070 21 36	49 18 00 49 15 00 49 15 00 49 13 48 49 12 00
01 01 01 01	06 06 06	40.00 41.00 42.00 43.00 44.00	032 27 00 032 49 48 033 17 24 033 47 24 034 15 36	43 55 48 44 04 12 44 13 48 44 21 00 44 30 00		01 01 01 01	07 07 07 07	54.00 55.00 56.00 57.00 58.00	070 55 12 071 24 36 071 52 48 072 24 00 072 55 12	49 10 48 49 09 36 49 06 36 49 05 24 49 02 24
01 01 01 01 01	06 06 06	45.00 46.00 47.00 48.00 49.00	034 40 48 035 05 24 035 34 12 036 01 12 036 27 36	44 37 48 44 47 24 44 59 24 45 02 24 45 13 48		01 01 01 01 01	07 08 08 08 08	59.00 00.00 01.00 02.00 03.00	073 31 12 074 02 24 074 35 24 075 07 48 075 38 24	49 00 36 48 58 12 48 54 36 48 52 12 48 51 36
01 01 01 01 01	06 06 06 06	50.00 51.00 52.00 53.00 54.00	036 48 00 037 06 00 037 29 24 038 03 00 038 50 24	45 22 12 45 29 24 45 40 12 45 48 36 45 53 24		01 01 01 01 01	08 08 08 08	04.00 05.00 06.00 07.00 08.00	076 07 48 076 37 48 077 11 24 077 40 12 078 07 48	48 46 12 48 42 36 48 40 48 48 36 36 48 32 24
01 01 01 01 01	06 06 06 06	55.00 56.00 57.00 58.00 59.00	039 22 48 039 45 00 040 12 36 040 46 12 041 17 24	46 01 12 46 07 48 46 16 48 46 24 36 46 32 24		01 01 01 01 01	08 08 08 08	09.00 10.00 11.00 12.00 13.00	078 40 48 079 09 00 079 39 00 080 09 00 080 36 36	48 28 48 48 24 36 48 21 00 48 18 00 48 12 36
01 01 01 01 01	07 07 07 07	00.00 01.00 02.00 03.00 04.00	041 48 36 042 17 24 042 46 12 043 15 00 043 46 12	46 39 00 46 44 24 46 52 12 47 00 36 47 06 00		01 01 01 01	08 08 08 08	14.00 15.00 16.00 17.00 18.00	081 04 48 081 31 12 082 00 36 082 30 00 082 58 12	48 09 00 48 03 36 48 00 00 47 54 36 47 50 24
01 01 01 01	07 07 07 07 07	05.00 06.00 07.00 08.00 09.00	044 16 48 044 49 48 045 20 24 045 46 48 046 13 48	47 14 24 47 19 12 47 22 48 47 31 12 47 37 12		01 01 01 01 01	08	19.00 20.00 21.00 22.00 23.00	083 30 00 083 57 00 084 27 00 084 55 48 085 21 00	47 45 36 47 42 36 47 36 36 47 30 36 47 24 36
01 01 01 01	07 07 07 07	10.00 15.00 16.00 17.00 18.00	046 35 24 049 07 48 049 51 00 050 27 36 051 00 00	47 45 00 48 06 00 48 11 24 48 18 00 48 19 12		01 01 01 01	08 08 08	25.00 26.00 27.00	085 47 24 086 13 12 086 40 48 087 06 36 087 25 12	47 19 48 47 14 24 47 09 00 47 01 12 46 57 00
01 01 01 01	07 07	19.00 20.00 21.00 22.00 23.00	051 28 48 052 03 00 052 45 00 053 29 24 053 52 12	48 25 12 48 28 48 48 34 12 48 37 12 48 40 48		01 01 01 01	08 08 08	30.00 31.00 32.00	087 57 00 088 22 48 088 49 48 089 17 24 089 42 36	46 51 00 46 48 36 46 40 12 46 32 24 46 26 24 _
01 01 01 01	07 07 07	24.00 25.00 26.00 27.00 28.00	054 27 00 054 54 36 055 25 12 056 06 00 056 38 24	48 45 36 48 49 12 48 52 12 48 55 12 48 58 12		01 61 01 01	08	35.00 36.00 37.00	090 07 48 090 34 48 091 00 36 091 24 00 091 49 12	46 21 00 46 14 24 46 07 48 46 00 36 45 54 00
01 01 01 01	07	30.00 31.00 32.00	057 11 24 057 46 12 058 21 00 058 49 48 059 24 36	49 06 36 49 09 36		01 01 01 01	1 08 1 08	40.00 41.00 42.00	092 14 24 092 39 00 092 57 36 093 21 36 093 43 48	45 49 12 45 42 00 45 35 24 45 28 12 45 21 36
01 01 01 01	L 07 L 07 L 07	35.00 36.00 37.00	059 56 24 060 35 24 061 06 00 061 40 12 062 09 00	49 12 00 49 13 12 49 14 24		0	1 0 1 0 1 0	45.00 8 46.00 8 47.00	094 09 36 094 31 48 094 55 12 095 16 12 095 37 48	45 07 48 45 00 00 44 54 36
0	1 07 1 07 1 07	7 40.00 7 41.00 7 42.00	062 42 36 063 15 00 063 50 24 064 24 00 064 55 48	49 16 48 49 16 48 49 18 00		0 0 0	1 0 1 0 1 0	8 50.00 8 51.00 8 52.00	096 00 36 096 23 24 096 43 48 097 07 48 097 32 24	44 32 24 44 25 12 44 17 24
0		7 45.00 7 46.00 7 47.00	065 30 36 065 57 36 066 31 12 067 06 36 067 42 36	49 18 00 49 18 00 49 18 00	·	0	1 0 1 0 1 0 1 0	8 55.00 8 56.00	097 49 48 098 09 00 098 31 12 098 49 12 099 13 48	43 53 24 2 43 47 24 2 43 39 00

					16 MAY 58				
HR	MIN	SEC	AZIMUTH	ELEVATION		HR I	MIN SEC	AZIMUTH	ELEVATION
01 01 01 01	09 09 09	59.00 00.00 01.00 02.00 03.00	099 33 00 099 49 48 100 09 36 100 33 36 100 52 12	43 22 12 43 17 24 43 16 12 43 01 48 42 54 36		01 01 01	10 09.00 10 10.00 10 11.00 10 12.00 10 13.00	116 44 24 116 56 24 117 06 36 117 16 12 117 28 48	34 20 24 34 12 00 34 05 24 33 57 36 33 48 36
01 01 01 01	09 09 09	04.00 05.00 06.00 07.00 08.00	101 09 36 101 28 12 101 48 00 102 06 00 102 28 12	42 46 12 42 38 24 42 30 36 42 24 00 42 17 24		01 01 01	10 14.00 10 15.00 10 16.00 10 17.00 10 18.00	117 40 12 117 46 12 117 58 48 118 08 24 118 16 48	33 43 12 33 36 36 33 27 36 33 20 24 33 13 48
01 01 01 01	09	09.00 10.00 11.00 12.00 13.00	102 46 12 103 04 48 103 19 48 103 40 12 104 00 00	42 11 24 42 01 12 41 54 36 41 45 00 41 39 36		01 01	10 19.00 10 20.00 10 21.00 10 22.00 10 23.00	118 27 36 118 37 12 118 45 36 118 54 36 119 04 48	33 07 48 33 00 00 32 51 36 32 45 36 32 38 24
01 01 01 01 01	09 09 09 09	14.00 15.00 16.00 17.00 18.00	104 16 12 104 34 48 104 49 12 105 06 00 105 22 48	41 30 00 41 22 12 41 14 24 41 06 00 41 00 00		01 01 01 01 01	10 24.00 10 25.00 10 26.00 10 27.00 10 28.00	119 15 00 119 25 12 119 34 12 119 43 12 119 50 24	32 29 24 . 32 21 36 32 16 48 32 10 12 32 01 48
01 01 01 01	09 09 09 09	19.00 20.00 21.00 22.00 23.00	105 42 00 105 56 24 106 12 36 106 27 36 106 43 12	40 51 00 40 44 24 40 34 12 40 26 24 40 18 00		01 01 01 01	10 29.00 10 30.00 10 31.00 10 32.00 10 33.00	119 58 12 120 08 24 120 18 00 120 25 48 120 36 36	31 54 00 31 48 36 31 39 36 31 33 36 31 27 00
01 01 01 01	09 09 09 09	24 • 00 25 • 00 26 • 00 27 • 00 28 • 00	107 01 12 107 15 36 107 30 00 107 48 36 108 04 12	40 10 12 40 01 12 39 55 12 39 45 36 39 37 48		01 01 01 01 01	10 34.00 10 35.00 10 36.00 10 37.00 10 38.00	120 43 48 120 51 36 121 00 00 121 09 36 121 18 00	31 19 48 31 11 24 31 04 12 30 58 48 30 52 12
01 01 01 01	09 09 09 09	29.00 30.00 31.00 32.00 33.00	108 16 12 108 30 00 108 48 00 109 02 24 109 18 36	39 28 48 39 21 36 39 15 00 39 05 24 38 58 48		01 01 01 01 01	10 39.00 10 40.00 10 41.00 10 42.00 10 43.00	121 25 48 121 34 12 121 42 36 121 49 48 121 57 00	30 46 12 30 39 00 30 31 48 30 24 36 30 18 00
01 01 01 01	09 09	34.00 35.00 36.00 37.00 38.00	109 34 12 109 46 12 110 00 00 110 13 48 110 28 48	38 51 00 38 42 36 39 34 48 38 25 48 38 19 12		01 01 01 01 01	10 44.00 10 45.00 10 46.00 10 47.00 10 48.00	122 07 48 122 15 00 122 22 12 122 30 00 122 37 12	30 10 12 30 04 12 29 58 12 29 52 12 29 43 48
01 01 01 01	09 09 09	39.00 40.00 41.00 42.00 43.00	110 41 24 110 55 48 111 12 00 111 24 36 111 36 36	38 10 48 38 01 48 37 56 24 37 49 48 37 40 48		01 01 01 01	10 49.00 10 50.00 10 51.00 10 52.00 10 53.00	122 45 00 122 51 36 122 58 12 123 07 12 123 15 00	29 37 12 29 31 48 29 25 48 29 18 36 29 13 12
01 01 01 01	1 09 1 09 1 09	45.00 46.00 47.00	111 49 48 112 04 12 112 17 24 112 28 12 112 41 24	37 24 36 37 16 48 37 09 00		01 01 01 01 01	10 55.00 10 56.00 10 57.00	123 25 48 123 30 00 123 38 24 123 45 36 123 51 00	28 45 36
0		50.00 51.00 52.00	112 54 36 112 09 00 113 19 48 113 32 24 113 43 13	36 46 48 3 36 38 24 4 36 29 24		01 01 01 01	11 00.00 11 01.00 11 02.00	123 57 36 124 03 36 124 12 36 124 25 12 124 27 00	28 27 36 28 19 48 28 15 00
0	01 0° 01 0° 01 0°	9 55.00 9 56.00 9 57.00	113 56 24 114 08 24 114 22 1 114 32 2 114 43 1	4 36 06 36 2 35 59 24 4 35 52 12		0:	1 11 05.00 1 11 06.00 1 11 07.00	124 39 00 124 45 30 124 51 00	27 52 12 5 27 45 36 27 39 36
0		0 00.00	115 29 2	4 35 28 48 8 35 21 00 4 35 15 00		0	1 11 10.00 1 11 11.00 1 11 12.00	125 12 3 125 18 3 125 26 2	6 27 21 36 6 27 16 12 4 27 10 12
	01 1 01 1 01 1	0 04.00 0 05.00 0 06.00 0 07.00	116 02 2 116 14 2 116 24 3	4 34 50 24 4 34 42 36 36 34 35 24		0	1 11 14.00 1 11 15.00 1 11 16.00 1 11 17.00 1 11 18.00	125 46 1 125 51 3 125 57 0	2 26 51 36 6 26 45 36 0 26 39 00

PATRICK AF8 THEOD. STA. 1.40 LAT. 28 27 58 N LONG. 279 24 38 E HT 0010 M 16 MAY 58

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HR	MIN	SEC	AZIMUTH	ELEVATION		HR	MIN	SEC	AZIMUTH	ELEVATION
01 01 01 01	11 11 11 11	19.00 20.00 21.00 22.00 23.00	126 08 24 126 14 24 126 22 12 126 28 12 126 34 12	26 27 36 26 21 00 26 15 00 26 09 36 26 03 00		01 01 01 01	12	12.00 13.00 14.00 15.00 16.00	130 41 24 130 45 36 130 50 24 130 53 24 130 28 48	21 34 12 21 30 36 21 23 24 21 16 48 21 12 00
01 01 01 01 01	11 11 11 11	24.00 25.00 26.00 27.00 28.00	126 39 00 126 46 48 126 51 36 126 57 36 127 03 36	25 56 24 25 51 36 25 46 48 25 40 12 25 33 36		01 01 01 01	12 12 12 12 12	17.00 18.00 19.00 20.00 21.00	131 03 36 131 07 12 131 10 48 131 13 48 131 18 36	21 07 12 21 03 00 20 58 48 20 52 48 20 48 36
01 01 01 01 01	11 11 11 11 11	29.00 30.00 31.00 32.00 33.00	127 07 12 127 12 00 127 18 00 127 25 48 127 30 36	25 28 12 25 21 36 25 16 48 25 10 48 25 06 00		01 01 01 01 01	12 12 12 12 12	22.00 23.00 24.00 25.00 26.00	131 21 36 131 25 48 131 30 00 131 35 24 131 39 00	20 43 12 20 37 48 20 33 36 20 28 12 20 21 36
01 01 01 01	11 11 11 11 11	34.00 35.00 36.00 37.00 38.00	127 37 48 127 42 36 127 46 48 127 53 24 127 56 24	25 00 36 24 53 24 24 49 12 24 42 00 24 37 48		01 01 01 01 01	12 12 12 12 12	27.00 28.00 29.00 30.00 31.00	131 42 36 131 48 00 131 50 24 131 54 36 131 59 24	20 18 36 20 14 24 20 09 00 20 04 48 20 00 00
01 01 01 01	11 11 11 11	39.00 40.00 41.00 42.00 43.00	128 03 00 128 07 12 128 12 00 128 18 36 128 25 48	24 30 00 24 25 48 24 20 24 24 15 36 24 10 12		01 01 01 01	12	32.00 33.00 34.00 35.00 36.00	132 03 36 132 06 36 132 10 48 132 14 24 132 17 24	19 56 24 19 51 00 19 45 00 19 39 36 19 33 00
01 01 01 01	11 11 11 11 11	44.00 45.00 46.00 47.00 48.00	128 30 36 128 36 36 128 39 36 128 43 48 128 51 36	24 04 12 23 55 48 23 51 36 23 46 12 23 40 48		01 01 01 01	12 12 12	37.00 38.00 39.00 40.00 41.00	132 21 00 132 24 00 132 28 12 132 32 24 132 37 12	19 30 36 19 27 00 19 21 00 19 16 12 19 10 48
01 01 01 01	11 11 11 11	49.00 50.00 51.00 52.00 53.00	128 56 24 128 59 24 129 03 36 129 07 48 129 12 36	23 35 24 23 29 24 23 24 36 23 19 12 23 14 24		0 1 0 1 0 1	12 1 12 1 12	42.00 43.00 44.00 45.00 46.00	132 40 12 132 43 48 132 48 00 132 52 12 132 54 36	19 07 12 19 03 00 18 57 36 18 52 48 18 48 36
01 01 01 01	11 11 11	57.00	129 16 12 129 19 12 129 30 00 129 34 48 129 38 24	23 07 48 23 01 48 22 58 48 22 51 36 22 46 12		0: 0: 0:	1 12 1 12 1 12	48.00 49.00 50.00	132 57 00 133 01 12 133 04 48 133 08 24 133 10 48	18 45 00 18 40 12 18 34 48 18 30 00 18 25 12
01 01 01 01	1 12 1 12 1 12	00.00 01.00 02.00	129 42 36 129 47 24 129 52 48 129 57 36 130 01 12	22 30 36 22 24 36		00000	1 12 1 12 1 12	53.00 54.00 55.00	133 16 12 133 20 24 133 24 36 133 27 00 133 31 12	18 21 36 18 18 36 18 13 12 18 10 48 18 08 24
0000	1 12 1 12 1 13	2 05 • 00 2 06 • 00 2 07 • 00	130 06 00 130 10 12 130 15 00 130 18 36 130 22 48	22 09 36 22 04 48 21 59 24			1 12	58.00 59.00 3 00.00	133 35 00 133 42 00 133 49 48 133 54 00 134 00 36	18 04 12 17 58 48 17 54 00
	1 1 1 1 1 1	2 10.00	130 28 48 - 130 34 12 130 37 12	21 43 48		c	01 1: 01 1: 01 1:	3 03.00	134 05 24 134 12 36 134 19 12	17 44 24

PATRICK AF8 THEOD. STA. 1.50 LAT. 28 24 29 N LONG. 279 24 09 E HT 0012 M

					10 MAI 30				
HR	MIN	SEC	AZIMUTH	ELEVATION	HR	MIN	SEC	AZIMUTH	ELEVATION
01 01 01 01 01	08 08 09	57.00 58.00 59.00 00.00 01.00	109 54 36 110 10 12 110 24 00 110 38 24 110 52 48	38 25 24 38 20 24 38 13 12 38 04 48 37 57 00	01 01 01 01 01	09 09 09	07.00 08.00	111 57 36 112 11 24 112 26 24 112 37 48 112 52 12	37 16 48 37 09 00 37 03 00 36 55 12 36 47 24
01 01 01 01	09 09 09	02.00 03.00 04.00 05.00	111 04 12 111 19 48 111 30 36 111 45 36	37 48 36 37 40 12 37 33 36 37 25 12	01 01 01	09 09	11.00 12.00 13.00 14.00	113 01 48 113 15 00 113 28 48 113 37 12	36 39 00 36 31 12 36 23 24 36 16 48

		16 MAY 58		
HR MIN SEC	AZIMUTH ELEVATION		HR MIN SEC	AZIMUTH ELEVATION
01 09 15.00	113 49 48 36 09 36		01 10 25.00	124 27 36 27 57 36
01 09 16.00	114 03 00 36 01 12		01 10 26.00	124 33 36 27 50 24
01 09 17.00	113 15 00 35 54 00		01 10 27.00	124 39 36 27 43 12
01 09 18.00	114 30 00 35 46 48		01 10 28.00	124 48 36 27 37 12
01 09 19.00	114 38 24 35 39 00		01 10 29.00	124 55 12 27 31 12
01 09 20.00	114 51 36 35 30 36		01 10 30.00	125 02 24 27 25 12
01 09 21.00	115 02 24 35 22 48		01 10 31.00	125 08 24 27 19 48
01 09 22.00	115 13 12 35 15 00		01 10 32.00	125 14 24 27 15 00
01 09 23.00	115 24 00 35 09 00		01 10 33.00	125 21 00 27 07 12
01 09 24.00	115 35 24 35 00 36		01 10 34.00	125 25 48 27 00 00
01 09 25.00	115 45 36 34 53 24		01 10 35.00	125 31 48 26 52 48
01 09 26.00	115 56 24 34 45 36		01 10 36.00	125 39 00 26 48 36
01 09 27.00	116 07 12 34 38 24		01 10 37.00	125 45 36 26 42 00
01 09 28.00	116 17 24 34 31 12		01 10 38.00	125 52 48 26 35 24
01 09 29.00	116 30 00 34 22 48		01 10 39.00	125 58 48 26 29 24
01 09 30 00	116 41 24 34 15 00		01 10 40.00	126 04 48 26 24 36
01 09 31 00	116 52 12 34 07 12		01 10 41.00	126 11 24 26 19 12
01 09 32 00	117 03 00 34 00 00		01 10 42.00	126 18 36 26 13 12
01 09 33 00	117 12 00 33 52 48		01 10 43.00	126 24 00 26 08 24
01 09 34 00	117 21 36 33 45 00		01 10 44.00	126 32 24 26 00 36
01 09 35.00	117 31 48 33 38 24		01 10 45.00	126 34 48 25 55 12
01 09 36.00	117 40 12 33 31 12		01 10 46.00	126 40 12 25 48 36
01 09 37.00	117 53 24 33 24 36		01 10 47.00	126 46 12 25 43 12
01 09 38.00	116 01 48 33 16 12		01 10 48.00	126 53 24 25 39 00
01 09 39.00	118 11 24 33 07 48		01 10 49.00	126 57 36 25 30 36
01 09 40.00	118 19 48 33 01 12		01 10 50.00	127 04 12 25 25 48
01 09 41.00	118 31 12 32 56 24		01 10 51.00	127 10 12 25 19 48
01 09 42.00	118 42 00 32 49 12		01 10 52.00	127 14 24 25 13 12
01 09 43.00	118 52 12 32 41 24		01 10 53.00	127 19 12 25 07 12
01 09 44.00	119 00 00 32 32 24		01 10 54.00	127 24 36 25 01 12
01 09 45.00	119 10 12 32 25 48		01 10 55.00	127 31 12 24 55 48
01 09 46.00	119 17 24 32 18 00		01 10 56.00	127 34 48 24 49 12
01 09 47.00	119 27 00 32 10 48		01 10 57.00	127 40 48 24 45 00
01 09 48.00	119 39 00 32 03 36		01 10 58.00	127 46 48 24 39 00
01 09 49.00	119 45 36 31 57 36		01 10 59.00	127 52 48 24 32 24
01 09 50.00	119 54 36 31 49 48		01 11 00.00	127 59 24 24 28 48
01 09 51.00	120 03 36 31 42 00		01 11 01.00	128 04 12 24 22 48
01 09 52.00	120 12 00 31 36 36		01 11 02.00	128 09 36 24 16 12
01 09 53.00	120 17 24 31 30 00		01 11 03.00	128 17 24 24 10 12
01 09 54.00	120 27 36 31 23 24		01 11 04.00	128 24 00 24 06 00
01 09 55.00	120 38 24 31 17 24		01 11 05.00	128 25 48 24 01 48
01 09 56.00	120 46 12 31 09 00		01 11 06.00	128 32 24 23 54 36
01 09 57.00	120 54 36 31 03 36		01 11 07.00	128 36 36 23 49 48
01 09 58.00	121 04 48 30 56 24		01 11 08.00	128 40 12 23 43 12
01 09 59.00	121 11 24 30 48 36		01 11 09.00	128 43 48 23 37 12
01 10 00*00	121 21 00 30 40 48		01 11 10.00	128 49 12 23 30 00
61 10 01*00	121 28 48 30 33 36		01 11 11.00	128 54 36 23 25 12
01 10 02*00	121 37 12 30 27 00		01 11 12.00	128 59 24 23 19 48
01 10 03*00	121 45 00 30 19 46		01 11 13.00	129 04 12 23 14 24
01 10 04*00	121 52 48 30 13 12		01 11 14.00	129 08 24 23 09 36
01 10 05.00 01 10 06.00 01 10 07.00 01 10 08.00 01 10 09.00	122 08 24 30 01 12 122 16 48 29 55 12 122 24 00 29 47 24	•	01 11 15.00 01 11 16.00 01 11 17.00 01 11 18.00 01 11 19.00	129 14 24 23 04 48 129 19 12 22 59 24 129 24 00 22 54 36 129 28 48 22 48 36 129 33 36 22 42 36
01 10 10•00 01 10 11•00 01 10 12•00 01 10 13•00 01 10 14•00	122 49 12 29 27 36 122 55 12 29 20 24 123 04 48 29 14 24		01 11 20.00 01 11 21.00 01 11 22.00 01 11 23.00 01 11 24.00	129 39 36 22 38 24 129 43 12 22 31 1: 129 47 24 22 27 36 129 51 00 22 22 16 46
01 10 15-00 01 10 16-00 01 10 17-00 01 10 18-00 01 10 19-00	123 25 12 28 54 36 123 31 12 28 48 00 123 37 48 28 40 48		01 11 25.00 01 11 26.00 01 11 27.00 01 11 28.00 01 11 29.00	130 02 24 22 12 0 130 07 48 22 06 3 130 12 00 22 01 1 130 17 24 21 55 4 130 20 24 21 51 3
01 10 20.00 01 10 21.00 01 10 22.00 01 10 23.00 01 10 24.00	0 124 01 48 28 22 48 0 124 07 12 28 16 48 0 124 14 24 28 08 24		01 11 30.00 01 11 31.00 01 11 32.00 01 11 33.00 01 11 34.00	130 28 48 21 40 4 130 31 48 21 35 2 130 35 24 21 30 0

PATRICK AFB THEOO. STA. 1.50 LAT. 28 24 29 N LONG. 279 24 09 E HT 0012 M

HR	MIN	SEC	AZIMUTH	ELEVATION	HR	MIN	SEC .	AZIMUTH	ELEVATION
01 01	11 11	35.00 36.00	130 43 12 130 46 48	21 20 24 21 15 36	01 01	12	00.00 01.00	132 21 36 132 27 00	19 18 00 19 12 36
01 01	11 11 11	37.00 38.00	130 51 36 130 57 00 131 02 24	21 10 12 21 04 12 21 00 00	01 01 01	12 12 12	02.00	132 30 00 132 34 48	19 09 00 19 03 00
01	11	39•00 40•00	131 02 24	20 55 48	01	12	04.00	132 37 12 132 43 12	19 00 00 18 55 48
01	11	41.00	131 13 12	20 51 00	01	12	06.00	132 45 36	18 50 24
01	11	42.00 43.00	131 18 00 131 30 36	20 46 48 20 41 24	01 01	12	07.00 08.00	132 51 00 132 54 00	18 46 12 18 40 12
01	11	44.00	131 27 00	20 37 12	01	12	09.00	132 54 36	18 36 00
01 01	11	45.00 46.00	131 25 48 131 28 48	20 30 36 20 27 36	01 01	12 12	10.00 11.00	132 55 12 133 03 00	18 33 36 18 28 12
01 01	11	47•00 48•00	131 36 00 131 39 00	20 22 12 20 16 48	01 01	12 12	12.00 13.00	133 07 48 133 10 48	18 22 48 18 19 12
01	11	49•00	131 42 36	20 10 48	01	12	14.00	133 13 48	18 15 00
01 01	11	50:00 51:00	131 45 00 131 49 48	20 06 00 20 01 48	01 01	12	15.00 16.00	133 16 48 133 18 36	18 10 48 18 07 12
01 01	11	52•00 53•00	131 54 00 131 57 00	19 57 36 19 54 00	01 01	12	17.00 18.00	133 25 48 133 30 36	18 01 48 17 58 12
01	11	54.00	132 01 48	19 46 48	01	12	19.00	133 31 12	17 53 24
01 01	11	55.00 56.00	132 07 12 132 10 12	19 42 36 19 36 00	01 01	12	21.00	133 37 48 133 38 24	17 50 24 17 46 48
01	11	57.00 58.00	132 13 48 132 18 00	19 33 00 19 28 12	01 01		22 • 00 23 • 00	133 41 24 133 41 24	17 42 00 17 40 12
01	11	59.00	132 20 24	19 21 00	01	12	24•00	133 40 48	17 39 36

PATRICK AFB THEOO. STA: 1:40 LAT. 28 27 58 N LONG. 279 24 38 E HT 0010 M 16 MAY 58 HR MIN SEC AZIMUTH ELEVATION HR MIN SEC **AZIMUTH** ELEVATION 19 10 48 19 09 36 19 07 48 19 06 00 229 46 48 20 18 00 223 30 36 56 27.00 02 04.00 02 02 56 229 13 12 20 18 00 02 57 05.00 223 20 24 28.00 02 56 29.00 228 46 12 20 19 12 20 15 00 02 57 57 06.00 223 12 36 223 04 12 228 48 00 0.2 56 30.00 02 07.00 31.00 228 43 12 20 15 00 08.00 222 55 48 19 05 24 02 228 30 00 20 13 12 57 57 222 46 48 222 40 12 19 04 48 56 02 32.00 0.2 09.00 02 56 228 25 48 20 09 00 02 10.00 19 04 12 33.00 20 07 48 11.00 Ç2 56 34.00 228 16 12 02 57 222 32 24 19 03 36 228 05 24 20 06 00 222 19 12 19 01 12 0.2 56 35.00 0.2 57 12.00 227 55 48 02 20 04 12 222 09 00 56 02 13.00 18 55 48 36.00 227 44 24 57 02 56 37.00 20 02 24 02 14.00 222 01 12 18 52 12 227 40 48 227 30 00 20 01 48 57 57 221 55 12 221 48 36 18 50 24 18 50 24 02 56 38.00 02 15.00 0.2 56 39.00 02 16.00 227 21 00 19 56 24 221 42 00 0.2 56 40.00 02 17.00 18 49 12 41.00 227 07 12 57 221 35 24 02 221 28 12 221 22 12 221 16 12 19 52 48 19 51 36 02 57 57 18 46 48 18 45 36 56 56 226 56 24 19.00 02 42.00 02 43.00 226 46 48 02 20.00 19 50 24 19 47 24 02 56 44.00 226 36 36 02 57 21.00 18 45 26 45.00 02 56 226 28 12 0.2 57 **5**7 22.00 221 19 12 18 45 36 56 226 17 24 19 45 00 221 15 36 02 02 46.00 23.00 02 56 47.00 226 11 24 19 43 12 02 57 24.00 221 08 24 18 45 00 57 57 225 58 12 225 49 48 19 41 24 19 40 12 02 02 25.00 26.00 221 01 48 220 54 36 18 43 48 18 41 24 02 56 48.00 56 49.00 02 27.00 02 50.00 225 40 48 19 39 00 02 220 49 48 18 39 36 56 51.00 225 30 00 19 37 12 02 57 28.00 220 43 48 18 39 00 57 57 225 22 12 19 35 24 02 29.00 220 39 00 02 52.00 02 56 225 13 48 19 34 12 02 30.00 220 31 48 18 35 24 53.00 02 56 56 54.00 55.00 225 05 24 224 56 24 19 32 24 19 30 00 02 57 57 31.00 32.00 220 21 00 220 13 12 18 32 24 18 30 36 02 224 45 36 19 27 36 220 04 48 18 30 00 56.00 33.00 19 25 12 02 57 34.00 219 55 12 18 28 12 18 27 00 02 56 57.00 224 34 12 56 224 24 36 19 24 00 02 35.00 219 46 48 02 58.00 219 36 36 219 28 12 02 59.00 224 16 48 19 21 36 02 57 36.00 18 25 48 02 57 00.00 224 07 12 19 19 12 02 57 37.00 18 22 12 223 59 24 57 19 17 24 57 38.00 219 13 12 0.2 01.00 02 18 18 36

02 57 39.00

218 57 36

18 15 00

19 17 24 19 13 48

02 57

02.00

02 57 03 • 00

223 51 00

223 42 36

					10 MAT 38					
HR	MIN	SEC	AZIMUTH	ELEVATION		HR	MIN	SEC	AZIMUTH	ELEVATION
02 02 02		00.00 01.00 02.00 03.00 04.00	245 54 00 245 33 00 245 25 12 245 09 36 245 00 36	21 40 12 21 43 12 21 36 00 21 33 00 21 32 24		02 02 02 02 02	56	14.00 15.00 16.00 17.00 18.00	231 45 36 231 31 12 231 22 12 231 17 24 231 13 48	20 41 24 20 40 48 20 40 12 20 39 36 20 36 00
02 02 02 02 02	55 55 55 55 55	05.00 06.00 07.00 08.00 09.00	244 49 48 244 39 00 244 29 24 244 22 48 244 00 36	21 32 24 21 31 48 21 31 48 21 32 24 21 32 24		02 02 02 02 02	56	19.00 20.00 21.00 22.00 23.00	230 57 36 230 43 48 230 31 48 230 25 48 230 21 00	20 35 24 20 33 00 20 31 12 20 31 12 20 30 00
02 02 02 02 02	55 55 55 55	10.00 11.00 12.00 13.00 14.00	243 47 24 243 34 48 243 24 36 243 11 24 243 05 24	21 32 24 21 32 24 21 31 12 21 30 00 21 34 48		02 02 02 02 02	56 56 56 56	24.00 25.00 26.00 27.00 28.00	230 10 48 229 51 00 229 40 48 229 28 48 229 23 24	20 28 48 20 27 36 20 24 00 20 20 24 20 20 24
02 02 02 02 02	55 55 55 55 55	15.00 16.00 17.00 18.00 19.00	242 54 36 242 42 00 242 24 36 242 11 24 241 58 46	21 31 12 21 31 12 21 31 12 21 31 12 21 30 00		02 02 02 02 02	56 56 56	29.00 30.00 31.00 32.00 33.00	229 27 36 229 03 36 228 58 48 228 52 12 228 31 48	20 17 24 20 16 12 20 16 12 20 15 36 20 12 36
02 02 02 02 02	55 55 55 55	20.00 21.00 22.00 23.00 24.00	241 48 36 241 38 24 241 32 24 241 22 48 241 09 00	21 29 24 21 29 24 21 29 24 21 29 24 21 28 48		02 02 02 02	56 56 56	34.00 35.00 36.00 27.00 38.00	228 21 00 228 12 00 228 02 24 227 50 24 227 36 00	20 10 48 20 08 24 20 06 36 20 05 36 20 04 48
02 02 02 02 02	55	25.00 26.00 27.00 28.00 29.00	240 46 48 240 34 12 240 22 48 240 10 12 240 00 00	21 28 48 21 28 48 21 28 48 21 28 48 21 28 12		0 2 0 2 0 2 0 3	56 2 56 2 56	40.00 41.00 42.00	227 26 24 227 18 00 227 13 12 227 08 24 227 02 24	20 03 00 20 01 12 19 58 12 19 55 48 19 52 12
02 02 02 02 02	5 5 5 5 5 5	33.00 34.00 35.00 36.00 37.00	239 18 36 239 11 24 238 58 12 238 42 00 238 37 12	21 25 48 21 22 12 21 22 12 21 22 12 21 22 12		0.0	2 56 2 56 2 56 2 56	45.00 46.00 47.00	226 45 00 226 35 24 226 24 36 226 18 36 226 07 12	19 52 12 19 50 24 19 48 36 19 48 00 19 47 24
02 02 02 02	55 55	39.00 40.00 41.00	238 25 48 238 17 24 238 04 12 237 57 00 237 43 48	21 22 12 21 22 12 21 20 24 21 18 00 21 16 12		0	2 56 2 56 2 56 2 56 2 56	50.00 51.00 52.00	225 55 48 225 41 24 225 34 12 225 25 48 225 16 48	
	2 55 2 55 2 55	44.00 45.00 46.00	237 26 24 237 13 48 237 09 00 237 00 00 236 36 00	21 15 36		0	2 50 2 50 2 50 2 50 2 50 2 50	6 55.00 6 56.00 6 57.00	225 10 12 225 04 48 224 51 36 224 37 12 224 28 48	19 30 36 19 28 48 19 28 48
000		5 50.00 5 51.00 5 52.00	236 27 36 236 15 36 235 57 36 235 43 48 235 35 24	21 10 12 21 10 12 21 10 12		(	02 5 02 5 02 5 02 5 02 5	7 00.00 7 01.00 7 02.00	224 18 00 224 08 24 224 03 36 224 00 36 223 51 36	19 24 00 19 21 36 19 21 00
0 0	2 5 2 5 2 5 2 5 2 5 2 5	5 55.00 5 56.00 5 57.00	235 25 48 235 14 24 235 06 00 234 52 12 234 39 36	21 09 00 21 09 00 21 09 00		,	02 5 02 5 02 5	7 04.00 7 05.00 7 06.00 7 07.00 67 06.00	223 34 12 223 22 12 223 19 46 223 07 46 223 01 46	2 19 14 24 B 19 07 48 B 19 07 48
0	02 5 02 5	5 59.00 6 00.00 6 01.00 6 02.00 6 03.00	234 34 1: 234 22 1: 234 15 0: 234 03 0: 233 48 0:	2 21 03 00 0 20 58 48 0 20 57 36			02 5 02 5	57 09.00 57 10.00 57 11.00 57 12.00 57 13.00	222 20 2	2 18 58 48 0 18 57 00 4 18 56 24
•	02 5 02 5	66 04.00 66 05.00 66 06.00 56 07.00 56 08.00	233 10 4	4 20 58 12 6 20 54 00 8 20 48 36			02 02 02	57 14.00 57 15.00 57 16.00 57 17.00 57 18.00	222 04 4 221 59 2 221 54 3	8 18 52 48 4 18 50 24 6 18 48 36
	02 02 02	56 09.00 56 10.00 56 11.00 56 12.00 56 13.00	232 29 2 232 22 1 232 10 1	20 47 24 2 20 45 36 2 20 44 24			02 02 02	57 21.00	221 35 2 221 30 3 221 10 1	18 46 48 16 18 46 48 12 18 46 48

PATRICK AFB THEOD. STA. 1.50 LAT. 28 24 29 N LONG. 279 24 09 E HT 0012 M

HR	MIN	SEC	AZIMUTH	ELEVATION	HR	MIN	SEC	AZIMUTH	ELEVATION
02	57	24.00	221 06 00	18 46 48	02	57	39.00	219 02 24	18 43 12
02	57	25.00	220 57 36	18 46 48	02	57	40.00	218 52 12	18 43 12
02	57	26.00	220 25 48	18 46 48	02	57	41.00	218 49 48	18 43 12
02	57	27.00	220 21 00	18 46 48	02	57	42.00	218 40 48	18 43 12
02	57	28.00	220 21 00	18 46 48	02	57	43.00	218 34 48	18 43 12
02	57	29.00	220 03 36	18 46 48	02	57	44.00	218 17 24	18 43 12
02	57	30.00	219 59 24	18 46 12	02	57	45.00	218 03 00	18 43 12
02	57	31.00	219 59 24	18 46 12	02	57	46.00	217 55 12	18 43 12
02	57	32.00	219 59 24	18 46 12	02	57	47.00	217 45 36	18 43 12
02	57	33.00	219 46 12	18 46 12	02	57	48.00	217 42 36	18 43 1.2
02	57	34.00	219 25 12	18 46 12	02	57	49.30	217 42 00	18 43 12
02	57	35 • 00	219 25 12	18 46 12	02	57	50.00	217 41 24	18 43 12
02	57	36.00	219 25 12	18 43 12	02	57	51.00	217 39 36	18 43 12
02	57	37.00	219 25 12	18 43 12	02	57	52.00	217 33 00	18 43 12
02	57	38.00	219 04 12	18 43 12	02	57	53.00	217 01 48	18 43 12

PATRICK AFB THEO0. \$TA. 1.20 LAT. 28 31 29 N LONG. 279 26 21 E HT 0011 M

					16 MAY 58				
HR	MIN	SEC	AZIMUTH	ELEVATION		HR MI	IN SEC	AZIMUTH	ELEVATION
02	53	43.00	261 16 12	20 06 00		02 54	30.00	251 42 36	21 15 00
02		44.00	261 09 36	20 07 12		02 54		251 27 00	21 15 00
02	53	45.00	260 52 48	20 11 24		02 54	4 32.00	251 09 36	21 15 00
02		46 • 00	260 36 00	20 13 12		02 54		250 57 00	21 15 36
02	53	47.00	260 23 24	20 15 00		02 5	4 34.00	250 45 00	21 17 24
02	53	48.00	260 12 00	20 16 12		02 5		250 32 24	21 18 00
02 02	53 53	49.00 50.00	259 59 24 259 49 12	20 18 00 20 18 00		02 5 02 5		250 19 12 250 09 36	21 18 36 21 19 12
02	53	51+00	259 37 48	20 20 24		02 5		249 55 48	21 19 48
02	53	52.00	259 24 00	20 21 36		02 5		249 44 24	21 20 24
02	53	53.00	259 12 00	20 25 48		02 5		249 30 36	21 20 24
02	53	54.00	258 59 24	20 27 00		02 5		249 20 24	21 20 24
02 02	53 53	55 • 00 56 • 00	258 47 24 258 35 24	20 <b>29 24</b> 20 <b>32 24</b>	•	٠,	4 42.00 4 43.00	249 09 00 248 <b>49 48</b>	21 <b>21 36</b> 21 <b>22</b> 12
02	53	57.00	258 22 48	20 34 12		02 5		248 36 36	21 22 48
02	53	58.00	258 13 12	20 34 12		02 5	4 45.00	248 19 12	21 23 24
02	53	59.00	258 04 12	20 33 36		02 5		248 07 48	21 23 24
02		00.00	257 46 12	20 37 12			4 47.00	248 00 36	21 24 00
02	54	01.00	257 33 00	20 39 00			4 48.00	247 53 24	21 24 36
0.2		02.00	257 17 24	20 42 00			4 49.00	247 43 12	21 25 12
02		03.00	257 07 48	20 43 12			4 50.00	247 31 48	21 25 48
02		04+00	256 55 12	20 44 24			51.00	247 19 48	21 25 48
02		05 • 00 06 • 00	256 43 12 256 33 36	20 45 36 20 46 12			54 52.00 54 53.00	247 07 48 246 54 36	21 26 24 21 27 00
02		07.00	256 19 12	20 47 24			54 54 00	246 41 24	21 26 24
02		08.00	256 04 48	20 49 12			54 55.00	246 31 12	21 26 24
0.2		09.00	255 53 24	20 51 36			56.00	246 18 00	21 26 24
02		10.00 11.00	255 41 24 255 31 12	20 52 12 20 53 24			54 57.00 54 58.00	246 06 36	21 26 24
02 02		12.00	255 16 48	20 54 36			54 59.00	245 49 48 245 45 00	21 26 24 21 26 24
02		13.00	255 04 12	20 55 48		-	55 00.00	245 39 36	
02		14.00	254 51 36	20 57 00			55 01.00	245 30 00	21 27 00 21 27 36
o:		15.00	254 40 48	20 58 12			55 02.00	245 13 48	21 27 36
0	54	16.00	254 28 12	21 00 00			55 03.00	244 55 12	21 28 12
0:	2 54	17.00	254 13 48	21 01 12		02	55 04.00	244 41 24	21 27 00
0			254 01 48	21 02 24			55 05.00	244 32 24	21 27 36
0.			253 52 12	21 03 36			55 06.00	244 20 24	
0			253 39 36	21 04 12			55 07.00	244 09 00	
0			253 27 00 253 13 48				55 08.00 55 09.00	244 00 36 243 48 00	
				75/		_			
0			253 00 36				55 10.00	243 30 36	
	2 54 2 54		252 49 48 252 36 36			02 02	55 11.00 55 12.00	243 18 36 243 06 36	
	2 54		252 23 24			02	55 13.00	242 57 00	
	2 54		252 11 24			02	55 14.00	242 42 36	
	2 54		252 01 48			02	55 15.00	242 31 12	21 26 24
0	2 54	29.00	251 53 24	21 13 48		02	55 16.00	242 19 40	

				10 FIRT 70			
HR MIN	SEC	AZIMUTH	ELEVATION		HR MIN SEC	AZIMUTH E	ELEVATION
02 55 02 55 02 55 02 55 02 55	17.00 18.00 19.00 20.00 21.00	242 08 24 241 57 00 241 44 24 241 31 48 241 22 12	21 24 36 21 25 48 21 25 48 21 25 48 21 25 48		02 56 27.00 02 56 28.00 02 56 29.00 02 56 30.00 02 56 31.00	229 09 36 229 01 12 228 51 00	20 19 12 20 17 24 20 15 00 20 13 12 20 12 00
02 55 02 55 02 55 02 55 02 55	22.00 23.00 24.00 25.00 26.00	241 13 48 240 59 24 240 46 48 240 34 48 240 22 48	21 25 48 21 26 24 21 24 00 21 24 00 21 23 24		02 56 32.00 02 56 33.00 02 56 34.00 02 56 35.00 02 56 36.00	228 20 24 228 12 00 228 01 48	20 10 12 20 07 48 20 06 36 20 03 36 20 01 48
02 55 02 55 02 55 02 55 02 55	27.00 28.00 29.00 30.00 31.00	240 12 36 240 00 36 239 49 12 239 37 12 239 24 36	21 22 12 21 22 12 21 21 36 21 21 36 21 19 12		02 56 37.00 02 56 38.00 02 56 39.00 02 56 40.00 02 56 41.00	227 41 24 227 34 12 227 28 48 227 22 12 227 03 00	20 00 36 19 58 48 19 57 00 19 54 36 19 52 48
02 55 02 55 02 55 02 55 02 55	32.00 33.00 34.00 35.00 36.00	239 14 24 239 03 36 238 52 12 238 40 12 238 27 00	21 19 12 21 18 00 21 18 00 21 17 24 21 16 48	. 5	02 56 42.00 02 56 43.00 02 56 44.00 02 56 45.00 02 56 46.00	226 52 48 226 43 12 226 31 48 226 22 12 226 15 36	19 51 00 19 49 48 19 48 00 19 47 24 19 43 48
02 55 02 55 02 55 02 55 02 55	37.00 38.00 39.00 40.00 41.00	238 15 36 238 07 12 237 54 36 237 43 48 237 33 00	21 16 12 21 15 36 21 15 00 21 13 48 21 13 12		02 56 47.00 02 56 48.00 02 56 49.00 02 56 50.00 02 56 51.00	226 06 36 225 58 12 225 47 24 225 37 48 225 27 36	19 40 48 19 39 36 19 38 24 19 37 12 19 34 48
02 55 02 55 02 55 02 55 02 55		237 19 48 237 10 12 237 00 36 236 47 24 236 36 00	21 12 00 21 10 48 21 10 12 21 09 36 21 09 00		02 56 52.00 02 56 53.00 02 56 54.00 02 56 55.00 02 56 56.00	225 17 24 225 09 00 225 00 36 224 49 12 224 39 36	19 33 00 19 31 48 19 30 36 19 27 36 19 25 48
02 55 02 55 02 55 02 55 02 55	48.00 49.00 50.00	236 24 36 236 14 24 236 04 12 235 52 48 235 41 24	21 07 12 21 03 36 21 03 00 21 03 00 21 03 00		02 56 57.00 02 56 58.00 02 56 59.00 02 57 00.00 02 57 01.00		19 24 00 19 21 36 19 19 12 19 17 24 19 16 12
02 55 02 55 02 55 02 55 02 55	53.00 54.00 55.00	235 31 48 235 18 00 235 09 00 234 58 12 234 46 48	21 02 24 21 00 36 21 00 00 20 58 48 20 57 36		02 57 02.00 02 57 03.00 02 57 04.00 02 57 05.00 02 57 06.00	223 36 00 223 27 00 223 19 12	19 13 48 19 10 48 19 09 00 19 06 00 19 05 24
02 55 02 55 02 55 02 56 02 56	5 58.00 5 59.00 6 00.00	234 36 00 234 23 24 234 13 48 234 07 12 233 58 48			02 57 07.00 02 57 08.00 02 57 09.00 02 57 10.00 02 57 11.00	222 54 00 222 48 36 222 42 36	19 03 C0 18 59 24 18 58 12 18 55 12 18 51 36
02 5 02 5 02 5 02 5 02 5	6 03.00 6 04.00	233 44 24 233 31 12 233 20 24 233 07 48 232 57 36	20 49 12 20 48 00 20 47 24		02 57 12.0 02 57 13.0 02 57 14.0 02 57 15.0 02 57 16.0	222 18 36 221 51 00 221 48 00	18 49 48 18 46 48 18 45 36 18 44 24 18 42 36
02 5 02 5	6 08.00	232 46 12 232 33 36 232 25 46 232 15 36 232 05 24	20 43 12 8 20 42 00 5 20 40 48		02 57 17.0 02 57 18.0 02 57 19.0 02 57 20.0 02 57 21.0	0 221 19 48 0 221 10 48 0 221 03 36	18 41 24 18 40 12 18 38 24 18 36 00 18 34 12
02 02 02	66 12.00 66 13.00 66 14.00 56 15.00 56 16.00	231 34 1 231 26 2	0 20 34 12 2 20 34 12 4 20 34 12		02 57 22.0 02 57 23.0 02 57 24.0 02 57 25.0 02 57 26.0	0 220 19 48 0 220 11 24 0 220 00 00	
02 02 02	56 17.00 56 18.00 56 19.00 56 20.00 56 21.00	230 52 4 230 42 3 230 32 2	8 20 30 00 6 20 28 48 4 20 27 36		02 57 27•0 02 57 28•0 02 57 29•0 02 57 30•0 02 57 31•0	00 219 05 24 00 218 48 00 00 218 32 24	18 25 12 18 23 24 18 22 48
02		230 01 4 229 51 3 229 42 0	8 20 23 24 6 20 22 12 00 20 21 00		02 57 32. 02 57 33. 02 57 34. 02 57 35. 02 57 36.	217 40 48 20 217 27 36 20 217 23 24	18 18 00 18 16 12 18 14 24

				17 MAY 58			
HR MIN	SEC	AZIMUTH	ELEVATION		HR MIN SE	C AZIMUTH	ELEVATION
03 28 03 28 03 28 03 28 03 28	08.00 09.00 10.00 11.00 12.00	334 44 34 334 45 18 334 46 58 334 48 18 334 50 24	23 22 44 23 33 36 23 45 43 23 56 20 24 09 32		03 29 08 03 29 09 03 29 10 03 29 11 03 29 12 0	00 336 49 48 00 336 52 30 00 336 55 44	37 27 03 37 43 08 38 01 12 38 17 16 38 36 03
03 28 03 28 03 28 03 28 03 28	13.00 14.00 15.00 16.00 17.00	334 52 48 334 52 12 334 53 45 334 55 44 334 57 00	24 21 54 24 31 30 24 44 20 24 54 39 25 07 12		03 29 13 03 29 14 03 29 15 03 29 16 03 29 17 0	00 337 05 31 00 337 08 24 00 337 10 48	38 54 18 39 12 36 39 31 44 39 48 39 40 09 00
03 28 03 28 03 28 03 28 03 28	18.00 19.00 20.00 21.00 22.00	334 58 48 335 00 50 335 02 45 335 03 36 335 05 24	25 19 15 25 32 13 25 44 16 25 56 27 26 09 21		03 29 21		40 24 36 40 45 00 41 04 15 41 23 24 41 43 04
03 28 03 28 03 28 03 28 03 28	24.00 25.00 26.00	335 07 40 335 10 12 335 11 24 335 12 36 335 14 24	26 17 24 26 31 44 26 47 31 27 00 18 27 11 20		. 03 29 24 03 29 25 03 29 26	•00     337     36     03       •00     337     40     12       •00     337     46     30       •00     337     48     00       •00     337     52     30	41 59 24 42 20 45 42 41 24 42 59 27 43 20 06
03 28 03 28 03 28 03 28 03 28	29.00 30.00 31.00	335 15 43 335 18 00 335 19 15 335 21 18 335 22 55	27 24 00 27 38 13 27 51 00 28 04 48 28 16 48		03 29 29 03 29 30 03 29 31	.00 337 56 31 .00 337 59 56 .00 338 04 12 .00 338 08 06 .00 338 12 36	43 38 42 43 59 42 44 18 39 44 39 14 45 00 03
03 28 03 28 03 28 03 28 03 28	34.00 35.00 36.00	335 24 36 335 27 00 335 29 52 335 35 42 335 31 30	28 30 39 28 43 48 28 58 12 29 10 44 29 23 45		03 29 34 03 29 35 03 29 36	3.00 338 16 48 3.00 338 23 09 3.00 338 25 08 3.00 338 31 55 3.00 338 35 24	46 02 24 46 24 32
03 28 03 28 03 28 03 29	8 39.00 8 40.00 8 41.00	335 34 30 335 35 06 335 39 10 335 39 36 335 41 52	29 39 36 29 53 24 30 05 27 30 21 32 30 36 36		03 29 39 03 29 49 03 29 4	8.00 338 42 00 9.00 338 45 54 0.00 338 51 00 1.00 338 56 24 2.00 339 02 42	47 28 44 47 49 12 48 12 00
03 2 03 2 03 2 03 2 03 2	8 44.00 8 45.00	335 45 39 335 47 24 335 51 00 335 51 54 335 55 19	30 49 08 31 06 00 31 21 36 31 32 24 31 50 70		03 29 4 03 29 4 03 29 4	3.00 339 07 08 4.00 339 12 36 5.00 339 18 18 6.00 339 24 10 7.00 339 30 18	49 18 00 49 40 12 50 04 12
03 Z 03 Z 03 Z	8 48.00 8 49.00 8 50.00 28 51.00 28 52.00	335 56 20 335 58 12 336 00 00 336 02 24 336 04 15	32 34 37 32 49 44		03 29 4 03 29 5 03 29 5	8.00 339 36 54 9.00 339 44 24 0.00 339 47 24 1.00 339 54 20 2.00 339 59 50	4 51 10 58 4 51 33 50 8 51 54 00
03 03 03	28 53.00 28 54.00 28 55.00 28 56.00 28 57.00	336 06 54 336 09 00 336 11 06 336 12 54 336 16 15	33 34 12 33 49 44 34 07 12		03 29 5 03 29 5 03 29 5	33.00     340     09     0       54.00     340     15     5       55.00     340     21     3       56.00     340     30     1       37.00     340     36     1	7 53 09 00 6 53 30 36 8 53 54 39
03 03 03 03	28 58.00 28 59.00 29 00.00 29 01.00 29 02.00	336 19 04 336 22 08 336 25 44 336 28 13 326 29 56	34 55 12 4 35 11 52 2 35 27 00		03 29 03 30 03 30	58.00 340 46 1 59.00 340 50 4 00.00 341 01 4 01.00 341 09 2 02.00 341 19 0	5 55 06 54 4 55 32 34 1 55 57 36
03 03	29 03.00 29 04.00 29 05.00 29 06.00 29 07.00	336 36 2 336 40 2	4 36 17 24 8 36 34 15 2 36 49 12		03 30 03 30 03 30	03.00 341 26 0 04.00 341 36 0 05.00 341 45 1 06.00 341 54 4 07.00 342 03 3	57 10 12 8 57 35 38 3 58 04 08

					17 MAT 38					
HR M	AIN	SEC	AZ IMUTH	ELEVATION		HR	MIN S	EC	AZIMUTH	ELEVATION
03 3 03 3	30 0 30 1	08.00 09.00 10.00 11.00	342 14 45 342 24 36 342 36 00 342 46 01 342 56 24	58 53 24 59 17 24 59 43 48 60 09 03 60 37 08		03 03 03 03	31 19 31 20 31 21	.00 .00 .00	089 51 46 093 23 20 097 29 20 099 39 54 101 37 48	83 06 03 82 52 44 82 44 06 82 27 46 82 01 37
03 03 03	30 30 30	13.00 14.00 15.00 16.00 17.00	343 10 55 343 22 33 343 30 43 343 45 50 344 03 00	61 01 12 61 28 26 61 54 36 62 20 24 62 49 04		03 03 03 03	31 24 31 25 31 26	•00 •00 •00 •00	104 20 24 107 20 06 109 21 43 111 14 24 113 18 00	81 45 36 81 30 00 81 12 00 80 40 44 80 25 26
03 03 03	30 30 30	18.00 19.00 20.00 21.00 22.00	344 15 36 344 30 00 344 44 45 345 03 39 345 16 48	63 13 08 63 39 43 64 07 01 64 33 32 65 00 39		03 03 03 03	31 29 31 30 31 31	000	115 06 00 116 40 08 117 35 34 119 16 12 120 42 46	80 02 24 79 40 48 79 13 44 78 51 00 78 30,57
03 03	30 30 30	23.00 24.00 25.00 26.00 27.00	345 35 24 345 53 20 346 12 36 346 28 12 346 46 48	65 27 36 65 54 36 66 22 48 66 49 08 67 16 12		03 03 03 03	31 34 31 35 31 36	3.00 4.00 5.00 6.00 7.00	121 54 25 122 57 50 124 07 55 125 06 32 125 50 49	78 05 24 77 38 45 77 16 48 76 51 00 76 27 03
	30	28.00 29.00 30.00 31.00 32.00	347 08 24 347 31 15 347 47 38 348 16 15 348 39 00	67 43 12 68 15 00 68 36 14 69 07 08 69 33 00	•	03 03 03 03	31 31 31 4 31 4	8.00 9.00 0.00 1.00 2.00	126 42 00 127 35 56 128 29 24 128 58 08 129 39 32	76 01 01 75 39 46 75 16 51 74 53 24 74 24 00
03 03 03 03	30 30 30 30 30	33.00 34.00 35.00 36.00 37.00	349 05 45 349 30 50 349 57 00 350 34 12 350 59 24	70 02 31 70 30 00 70 58 15 71 23 52 71 49 12		03 03 03 03	31 4 31 4 31 4	3.00 4.00 5.00 6.00 7.00	130 26 38 130 50 24 131 29 09 132 01 08 132 34 58	74 03 36 73 39 36 73 14 24 72 49 44 72 22 48
03 03 03 03	30 30 30 30 30	38.00 39.00 40.00 41.00 42.00	351 30 54 352 04 04 352 51 18 353 27 03 354 05 27	72 21 00 72 47 24 73 17 24 73 44 16 74 09 00		03 03 03 03	31 4 31 5 31 5	8.00 9.00 0.00 1.00 2.00	133 00 46 133 32 49 133 52 08 134 20 24 134 43 12	72 01 30 71 36 00 71 12 54 70 48 46 70 25 08
03 03 03 03	30 30 30 30 30	43.00 44.00 45.00 46.00 47.00	354 48 52 355 33 18 356 23 06 257 10 37 358 01 48	74 36 57 75 01 48 75 31 08 75 57 21 76 25 12		03 03 03 03	31 5 31 5 31 5	53.00 54.00 55.00 56.00	135 04 08 135 30 18 135 48 39 136 14 24 136 27 36	69 59 56 69 36 00 69 12 36 68 50 09 68 24 32
03 03 03 03	30 30 30 30 30	48.00 49.00 50.00 51.00 52.00	359 03 39 000 06 32 001 16 26 002 35 24 003 46 51	76 51 36 77 17 24 77 42 00 78 07 58 78 37 15		0: 0: 0: 0:	3 31 3 32 3 32	58.00 59.00 00.00 01.00	136 47 42 137 15 14 137 19 44 137 41 24 137 55 58	68 03 03 67 44 16 67 19 48 66 55 48 66 31 12
03 03 03 03	30 30	53.00 54.00 55.00 56.00 57.00	005 01 04 006 39 36 008 21 36 010 07 12 011 44 24	. 78 58 22 79 24 36 79 52 01 80 15 39 80 38 56		0 0 0 0	3 32 3 32 3 32	03.00 04.00 05.00 06.00 07.00	138 09 39 138 27 50 138 43 15 138 55 48 139 10 48	66 07 22 65 47 20 65 24 28 65 01 12 64 38 56
03 03 03 03	30 31 31	00.00 01.00	013 52 12 016 17 24 018 51 00 021 03 54 023 34 48	81 20 56 81 43 48 82 00 36		0	3 32 3 32 3 32	08.00 09.00 10.00 11.00 12.00	139 21 07 139 33 00 139 46 40 139 58 48 140 12 07	63 55 48 63 34 44 63 12 39
03 03 03 03	31 31 31	04 • 00 05 • 00 06 • 00	026 41 42 030 04 44 033 37 48 037 29 24 041 26 24	82 54 00 83 07 12 83 22 48		0	3 32 3 32 3 32	13.00 14.00 15.00 16.00 17.00	140 22 44 140 30 54 140 44 24 140 54 00 141 01 30	62 08 24 61 48 03 61 24 36
03 03 03 03	3 31 3 31 3 31	09.00 10.00 11.00	044 53 56 050 48 36 055 00 00 059 15 46 064 28 03	83 49 15 83 53 49 83 58 12		(	3 32 3 32 3 32	18.00 19.00 20.00 21.00 22.00	141 09 36 141 21 39 141 27 00 141 39 36 141 47 20	60 22 12 60 01 48 59 42 28
	3 3		068 55 44 073 36 0 078 02 3 081 52 2 085 54 3	7 83 52 44 4 83 44 24 2 83 35 20			03 32	24.00 25.00	141 55 1: 142 04 1: 142 05 4: 142 20 5 142 28 4:	9 58 41 24 2 58 16 48 2 58 03 00

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HR	MIN	SEC	AZIMUTH	ELEVATION		1	HR MIN	SEC	AZIMUTH	ELEVATION
03 03 03 03	32 32 32 32 32	28.00 29.00 30.00 31.00 32.00	142 32 16 142 40 55 142 47 24 142 55 12 143 00 43	57 22 12 57 04 01 56 44 56 56 26 24 56 06 00			03 33 03 33 03 33 03 33 03 33	38.00 39.00 40.00 41.00 42.00	147 05 20 147 09 36 147 09 36 147 10 48 147 13 55	39 35 24 39 22 48 39 10 58 39 00 36 38 48 00
03 03 03 03	32 32 32 32 32	33.00 34.00 35.00 36.00 37.00	143 07 44 143 13 40 143 19 48 143 24 54 143 33 00	55 47 13 55 30 32 55 10 48 54 51 54 54 34 30			03 33 03 33 03 33 03 33 03 33	46.00	147 15 28 147 17 24 147 19 37 147 22 12 147 22 37	38 37 44 38 24 46 38 14 13 38 03 07 37 51 00
03 03 03 03	32 32 32 32 32	38.00 39.00 40.00 41.00 42.00	143 39 57 143 43 40 143 48 00 143 53 42 144 00 39	54 16 30 53 56 31 53 39 36 53 24 00 53 04 44			03 33 03 33 03 33 03 33 03 33	49.00 50.00 51.00	147 24 46 147 28 12 147 28 48 147 29 42 147 32 42	37 41 24 37 29 24 37 18 32 37 07 58 36 57 28
03 03 03 03		43.00 44.00 45.00 46.00 47.00	144 04 12 144 09 00 144 15 36 144 21 00 144 26 06	52 46 12 52 28 33 52 13 08 51 54 32 51 39 00			03 33 03 33 03 33 03 33	54.00 55.00 56.00	147 33 36 147 34 30 147 37 12 147 39 25 147 41 24	36 46 12 36 35 20 36 26 16 36 14 38 36 04 51
03 03 03 03	32 32 32	48.00 49.00 50.00 51.00 52.00	144 27 54 144 35 34 144 37 12 144 43 08 144 46 44	51 21 03 51 06 00 50 48 39 50 34 08 50 16 15			03 3: 03 3: 03 3: 03 3:	3 59.00 4 00.00 4 01.00	147 43 30 147 45 03 147 46 44 147 47 42 147 49 40	35 54 00 35 43 12 35 33 00 35 23 24 35 13 19
03 03 03 03	32 32 32	53.00 54.00 55.00 56.00 57.00	144 52 30 144 54 00 144 59 20 145 04 12 145 07 48	49 58 58 49 42 39 49 26 16 49 11 42 48 55 12			03 3 03 3 03 3 03 3	4 04.00 4 05.00 4 06.00	147 52 40 147 54 00 147 54 18 147 55 51 147 57 18	35 01 51 34 51 36 34 41 24 34 33 36 34 24 00
03 03 03	3 2 3 3 3 3 3 3	00.00	145 09 00 145 13 48 145 20 24 145 23 42 145 27 00	48 38 49 48 23 24 48 09 00 47 52 55 47 36 00			03 3 03 3	4 08.00 4 09.00 4 10.00 34 11.00	147 58 22 148 00 00 148 02 42 148 03 54 148 05 24	34 13 48 34 03 03 33 53 38 33 44 06 33 33 36
0	3 33 3 33	04.00 05.00 05.00	145 28 58 145 36 36 145 37 08 145 39 54 145 47 24	47 27 08 47 07 58 46 52 48 46 37 44 46 22 48			03 : 03 :	34 13.00 34 14.00 34 15.00 34 16.00 34 17.00	148 07 58 148 08 06 148 09 00 148 10 12 148 12 18	33 25 30 33 16 15 33 05 38 32 57 03 32 43 00
0	3 3: 3 3: 13 3: 13 3:	3 09.00 3 10.00 3 11.00	145 52 04 145 52 12 145 52 46 145 56 45 146 01 30				03 03 03	34 18.00 34 19.00 34 20.00 34 21.00 34 22.00	148 13 08 148 14 52 148 15 36 148 16 12 148 19 12	32 30 00 32 21 25 32 10 58
(	3 3 3 3 3 3 3 3 3 3	3 14.00 3 15.00 3 16.00	146 03 00 146 06 18 146 07 58 146 11 13 146 15 14	44 44 20 44 28 48 44 15 00			03 03 03	34 23.00 34 24.00 34 25.00 34 26.00 34 27.00	148 20 24 148 21 36 148 22 30 148 23 24 148 25 44	31 43 44 31 35 31 31 27 36
	03 3 03 3 03 3	3 18.00 3 19.00 3 20.00 3 21.00 33 22.00	146 17 24 146 18 36 146 22 19 146 25 30 146 28 23	43 34 22 5 43 21 00 43 08 24				34 28.00 34 29.00 34 30.00 34 31.00 34 32.00	148 27 00 148 27 00 148 28 37 148 29 56 148 31 08	31 00 03 30 53 13 30 43 15
	03 3 03 3	23.00 33 24.00 33 25.00 33 26.00 33 27.00	146 37 1	9 42 29 06 8 42 15 00 2 42 02 24			03 03 03 03	34 33.00 34 34.00 34 35.00 34 36.00 34 37.00	148 32 20 148 33 54 148 34 44 148 36 03 148 36 3	4 30 20 09 8 30 10 51 0 30 02 20
	03 03 03	33 28.00 33 29.00 33 30.00 33 31.00 33 32.00	146 45 3 146 47 2 146 49 1	6 41 24 36 4 41 12 00 2 40 58 55			03 03 03 03	34 38.00 34 39.00 34 40.00 34 41.00 34 42.00	148 40 2 148 42 0	0 29 38 38 2 29 28 48 3 29 21 32
	03 03 03	33 33.00 33 34.00 33 35.00 33 36.00 33 37.00	146 58 1 146 59 1 147 01 1	12 40 22 48 24 40 08 56 22 39 58 15			03 03 03 03	34 43.00 34 44.00 34 45.00 34 46.00 34 47.00	148 44 5 148 46 4 148 46 4	6 28 58 15 0 28 49 48 4 28 41 56

				17 MAY 58				
HR MIN	SEC	AZIMUTH	ELEVATION		HR MI	N SEC	AZIMUTH	ELEVATION
03 34 03 34 03 34 03 34 03 34	48.00 49.00 50.00 51.00 52.00	148 49 48 148 51 00 148 51 18 148 52 48 148 52 51	28 26 06 28 18 36 28 12 00 28 04 48 27 55 15		03 35 03 35 03 36 03 36 03 36	01.00	149 47 20 149 48 00 149 48 18 149 49 12 149 50 06	20 48 00 20 43 04 20 37 48 20 32 02 20 27 00
03 34 03 34 03 34 03 34 03 34	53.00 54.00 55.00 56.00 57.00	148 53 49 148 55 12 .148 55 48 148 57 25 148 58 12	27 48 43 27 40 48 27 34 08 27 25 48 27 18 36		03 36 03 36 03 36 03 36 03 36	04.00 05.00 06.00	149 50 24 149 51 00 149 52 12 149 52 51 149 53 42	20 21 36 20 15 36 20 10 12 20 04 15 19 59 34
03 34 03 34 03 35 03 35 03 35	58.00 59.00 00.00 01.00 02.00	148 59 56 149 00 32 149 01 55 149 02 24 149 03 36	27 11 24 27 04 04 26 56 02 26 49 08 26 42 00		03 36 03 36 03 36 03 36	09.00 10.00 11.00	149 53 42 149 54 39 149 56 06 149 57 00 149 56 24	19 54 35 19 48 18 19 42 00 19 36 36 19 33 00
03 35 03 35 03 35 03 35 03 35	03.00 04.00 05.00 06.00 07.00	149 03 54 149 05 24 149 07 12 149 08 16 149 08 24	26 35 20 26 29 06 26 20 42 26 13 12 26 06 36		03 36 03 36 03 36 03 36	5 14.00 5 15.00 5 16.00	149 56 24 149 57 00 149 57 43 149 58 40 149 58 48	19 27 00 19 21 46 19 15 39 19 11 42 19 06 36
03 35 03 35 03 35 03 35 03 35	08:00 09:00 10:00 11:00 12:00	149 08 24 149 09 54 149 11 20 149 12 00 149 12 54	25 58 12 25 52 33 25 45 36 25 40 12 25 30 18		03 3 03 3 03 3 03 3	6 19.00 6 20.00 6 21.00	150 00 18 150 01 12 150 00 54 150 00 54 150 02 16	19 00 36 18 56 24 18 51 36 18 47 24 18 41 24
03 35 03 35 03 35 03 35 03 35	13.00 14.00 15.00 16.00 17.00	149 13 48 149 15 00 149 15 25 149 15 54 149 16 30	25 25 12 25 16 28 25 12 00 25 04 48 24 58 44		03 3 03 3 03 3	6 23.00 6 24.00 6 25.00 6 26.00 6 27.00	150 02 42 150 03 36 150 04 15 150 04 48 150 05 20	18 35 24 18 30 39 18 25 12 18 20 20 18 15 36
03 35 03 35 03 35 03 35	19.00 20.00 21.00	149 18 54 149 19 12 149 19 12 149 19 12 149 20 52	24 53 02 24 44 24 24 38 49 24 31 22 24 26 13		03 3 03 3	28.00 29.00 36 30.00 36 31.00	150 05 24 150 06 36 150 06 36 150 07 04 150 07 30	18 10 48 18 054 18 00 36 17 55 40 17 51 00
03 35 03 35 03 35 03 35	24.00 25.00 26.00	149 22 08 149 22 44 149 24 00 149 24 18 149 25 37	24 19 44 24 12 28 24 06 00 23 58 48 23 53 56	1	03 3 03 3	36 33.00 36 34.00 36 35.00 36 36.00 36 37.00	150 08 24 150 09 36 150 09 54 150 10 44 150 10 48	17 47 06 17 41 24 17 35 49 17 31 22 17 26 31
03 3: 03 3: 03 3: 03 3	5 29.00 5 30.00 5 31.00	149 26 06 149 26 56 149 27 54 149 28 12 149 28 30	23 46 48 23 39 43 23 34 48 23 28 04 23 20 42		03 03 03	36 39.00 36 39.00 36 40.00 36 41.00 36 42.00	150 10 51 150 11 24 150 11 56 150 12 46 150 13 40	17 22 30 17 17 27 17 12 00 17 07 48 17 02 56
03 3 03 3 03 3 03 3	5 34.00 5 35.00	149 28 48 149 29 20 149 31 30 149 32 42 149 33 18	23 09 00 23 01 48 22 56 04		03 03 03	36 43.00 36 44.00 36 45.00 36 46.00 36 47.00	150 13 46 150 14 42 150 15 00 150 15 36 150 16 15	16 54 00 16 49 12 16 44 20
03 3 03 3 03 3	38.00 39.00 5 40.00 5 41.00 42.00	149 33 18 149 34 15 149 35 20 149 36 00 149 36 32	22 40 08 0 22 34 12 0 22 26 20			36 48.00 36 49.00 36 50.00 36 51.00 35 52.00	150 16 37 150 18 18 150 18 00 150 17 24 150 17 24	16 29 20 16 25 48 16 22 48
03 3 03 3	43.00 35 44.00 35 45.00 35 46.00 35 47.00	149 37 40 149 39 00 149 37 50 149 39 10 149 39 50	22 09 36 8 22 03 00 4 21 57 36		03 03 03 03	36 53.00 36 54.00 36 55.00 36 56.00 36 57.00	150 19 04 150 19 40 150 20 24 150 20 43 150 21 10	16 06 25 4 16 01 58 2 15 57 50
03 03 03	35 48.00 35 49.00 35 50.00 35 51.00 35 52.00	149 39 5 149 41 0 149 42 2 149 42 5 149 43 1	6 21 39 36 8 21 33 39 4 21 29 56		03 03 03 03	36 58.00 36 59.00 37 00.00 37 01.00 37 02.00	150 22 4 150 22 4 150 23 2	0 15 42 50 8 15 40 12 0 15 35 34
03		149 44 4 149 45 3 149 46 4	2 21 10 48 2 21 05 06 0 20 58 12			37 03.00 37 04.00 37 05.00 37 06.00 37 07.00	150 25 <b>0</b> 150 <b>2</b> 5 <b>4</b> 150 25 4	4 15 22 44 4 15 16 12 8 15 12 43

						17 MAY 58					
	HR	MIN	SEC	AZIMUTH	ELEVATION		HR	MIN S	SEC	AZIMUTH	ELEVATION
	03 03 03 03	37 37 37 37 37	08.00 09.00 10.00 11.00 12.00	150 25 55 150 25 55 150 27 18 150 27 18 150 27 54	15 03 46 14 59 56 14 55 12 14 51 39 14 46 19		03 03 03 03	38 19 38 20 38 21	8.00 9.00 0.00 1.00 2.00	150 55 12 150 55 12 150 55 22 150 56 16 150 57 18	10 28 48 10 25 22 10 21 43 10 17 42 10 13 48
	03 03 03 03	37 37 37 37 37	13.00 14.00 15.00 16.00 17.00	150 28 48 150 29 49 150 29 24 150 29 24 150 30 18	14 43 08 14 39 00 14 34 15 14 30 07 14 25 58		03 03 03 03	38 2 38 2 38 2	3.00 4.00 5.00 6.00 7.00	150 57 18 150 57 18 150 57 18 150 57 57 150 58 55	10 10 12 10 07 37 10 04 22 09 59 42 09 56 24
	03 03 03 03 03	37 37 37 37 37	18.00 19.00 20.00 21.00 22.00	150 30 36 150 31 04 150 31 12 150 31 15 150 33 00	14 21 36 14 17 06 14 13 04 14 09 00 14 04 33		03 03 03 03	38 2 38 3 38 3	8.00 9.00 0.00 31.00 32.00	150 59 02 150 59 06 150 59 16 150 59 56 150 59 56	09 52 30 09 49 01 09 45 39 09 42 00 09 38 56
	03 03 03 03	37 37 37 37 37	23.00 24.00 25.00 26.00 27.00	150 33 00 150 33 00 150 33 00 150 34 22 150 34 48	13 59 38 13 56 24 13 52 12 13 47 31 13 44 02		03 03 03 03	38 3 38 3	33.00 34.00 35.00 36.00 37.00	151 00 14 151 01 04 151 00 36 151 00 36 151 00 54	09 35 45 09 31 37 09 28 08 09 24 32 09 21 00
	03 03 03 03	37 37 37 37 37	28.00 29.00 30.00 31.00 32.00	150 35 13 150 35 56 150 36 14 150 36 18 150 36 36	13 39 36 13 36 32 13 32 02 13 27 36 13 24 00		03 03 03 03	38 38 38	38.00 39.00 40.00 41.00 42.00	151 01 26 151 01 48 151 02 20 151 02 56 151 03 54	09 16 44 09 14 42 09 13 12 09 12 36 09 10 48
	03 03 03 03		35.00 36.00	150 37 15 150 37 40 150 38 06 150 38 06 150 38 42	13 19 12 13 15 18 13 10 48 13 07 26 13 03 32		03 03 03	38 38 38	43.00 44.00 45.00 46.00 47.00	151 03 36 151 03 36 151 04 15 151 05 24 151 05 24	09 04 48 08 57 36 08 52 48 08 49 48 08 47 06
	03 03 03 03	37 37 37	39.00 40.00 41.00	150 39 54 150 39 54 150 39 54 150 39 54 150 41 24	12 58 48 • 12 55 44 12 52 01 12 48 00 12 43 12		0:	3 38 3 38 3 38	48.00 49.00 50.00 51.00 52.00	151 05 42 151 06 00 151 06 18 151 06 18 151 06 18	08 45 00 08 40 30 08 37 12 08 33 25 08 31 08
	03 03 03 03	37	44.00 45.00 46.00	150 41 42 150 42 00 150 42 32 150 42 36 150 43 08	12 32 24 12 28 48		0:	3 38 3 38 3 38	53.00 54.00 55.00 56.00 57.00	151 06 32 151 07 22 151 07 37 151 07 37 151 08 06	08 28 01 08 24 36 03 21 18 08 18 00 08 14 24
	03 03 03 03	3 3° 3 3°	7 49.00 7 50.00 7 51.00	150 43 08 150 43 48 150 44 24 150 45 00 150 45 00	12 15 00 12 12 00 12 08 24		000	3 38 3 39	58.00 59.00 00.00 01.00 02.00	151 09 00 151 09 32 151 09 32 151 09 36 151 09 36	08 10 48 08 07 48 08 03 54 08 00 32 07 58 15
		3 3 3 3		150 45 14 150 45 54 150 46 44 150 46 4	11 56 24 4 11 53 24 8 11 48 32		0	3 39 13 39 13 39 13 39 13 39	03.00 04.00 05.00 06.00 07.00	151 10 12 151 10 30 151 10 55 151 11 20 151 12 00	07 52 48 07 47 49 07 44 06
	0	3 3	7 58.00 7 59.00 8 00.00 8 01.00 8 02.00	150 46 5 150 47 2 150 48 3 150 48 3 150 48 3	7 11 38 27 2 11 34 48 6 11 31 55		(		08.00 09.00 10.00 11.00 12.00	151 12 36 151 12 54 151 13 08 151 13 08 151 13 12	07 34 48 07 31 44 07 28 30
	(	03 03 03	38 03.00 38 04.00 38 05.00 38 06.00 38 07.00	150 50 1 150 50 1 150 51 (	6 11 19 12 6 11 15 36 10 11 11 24			03 39 03 39 03 39 03 39 03 39	15.00 16.00	151 13 13 151 13 53 151 14 24 151 14 25 151 14 3	1 07 18 50 4 07 16 08 4 07 12 14
		03 03 03	38 08.00 38 09.00 38 10.00 38 11.00 38 12.00	150 52 ( 150 52 ) 150 52	01 11 00 36 12 10 58 08 12 10 53 34			03 39 03 39 03 39 03 39 03 39	19.00 20.00 21.00	151 14 4 151 14 5 151 15 0 151 15 0 151 16 0	6 07 01 48 0 06 59 24 0 06 55 40
٠		03 03 03	36 13.00 38 14.00 38 15.00 38 16.00 38 17.00	150 53 150 54 150 54	24 10 41 31 00 10 38 56 32 10 34 15			03 39 03 39 03 39 03 39 03 39	24.00 25.00 26.00	151 16 2 151 16 2 151 16 2	2 06 46 48 2 06 42 00 2 06 39 36

	Ε	DWARDS	AFB	THEO0.	STA.	9.		34 56 7 MAY		LONG.	242	05 14 E	н	T 078	<b>M</b>		
HR	MIN	SEC	A.7	IMUTH	E1	EVATION	•	IMAT	26								
03	39	28.00								HR	MIN	\$EC	ΑZ	HTUMI		ELEVA	TION
03	39	29.00		16 22 16 22	_	36 00 34 33				03	39	41.00		15 36		06 05	24
03 03	39 39	30.00 31.00	151	16 22 16 22	06	31 48				03 03	39 39	42.00 43.00	151	15 36 15 36	•	05 59	56
03	39	32.00	151	16 22		30 14 28 22				03 03	39 39	44.00	151	15 36	,	05 56 05 52	8 0
03	39	33.00	151	16 22	06	27 00						45.00	151	15 36	•	05 5]	18
03 03	39 39	34.00 35.00	151	16 48 18 00	06	25 37				03 03	39 39	46.00 47.00	151	15 39 15 39		05 51	
03	39 39	36.00	151	17 16		23 27 19 37				03 03	39 39	48.00	151	15 39	)	05 51 05 50	
		37.00	151	16 12	06	16 30				03	39	49.00 50.00	151	15 39 15 39		05 44	
03 03	39 39	38.00		16 12 16 12		12 00				03	39	51.00		15 39			
03	39	40.00		16 08		09 36 07 48				03	39 39	52.00	151	15 32	!	05 30 05 30	36
										• • •	27	53.00	151	15 18		05 27	00
	P	ATRICK	AFB	THEO0.	STA.	1.20	LAT.	28 31	29 N	LONG.	270	24 21 -		L			
										LONG.	219	26 21 E	н	T 0011	М		
HR	MIN	SEC	4.7	IMUTH	<b>C.</b> I		•	7 MAY	28								
01		42.00				EVATION				HR	MIN	SEC	AZ	IMUTH		ELEVA	TION
01	44	43.00	316	05 36 04 48		44 24 52 12				01	45	31.00	310	33 36	,	28 45	00
01 01		44.00		59 24 55 12	21	02 24				01 01	45	32.00 33.00	310	27 36 19 48	,	28 53	24
01		46.00		49 48		09 35 22 12				01 01	45	34.00	310	09 00	)	29 07 29 19	
01		47.00	315	43 48	21	28 48					45	35.00	310	00 00		29 28	
01		48.00 49.00		37 48 34 12	21	38 24				01 01	45 45	36.00 37.00	309	50 24 43 48		29 39	
01 01	44	50.00	315	25 12	21	48 00 56 24				01	45	38.00	309	33 00	)	29 50 30 00	36
		51.00	315	21 00	22	06 00				01	45	39.00 40.00	309 309	25 48 16 48		30 12 30 26	
01		52.00 53.00		15 00 07 48		13 48				01	45	41.00		05 24			
01 01	44	54.00	315	01 12		22 48 31 48				01	45	42.00	308	55 12		30 36 30 47	
01		55.00 56.00		55 48 49 12	22	40 48 52 12				01	45 45	43.00	309 308	45 36 34 48	,	30 59 31 08	24
01	44	57.00								91	45	45.00	309	24 36		31 19	
	44	58.00	314	42 36 38 24	23	03 36				01	45	46.00	308	16 48		31 30	36
01		59.00		31 48 25 48	23	19 12 29 24				01 01	45 45	47.00 48.00	30s 307	07 48 57 00		31 37 31 54	12
01	45	01.00		20 24		38 24				01 01	45 45	49.00	307	46 48		32 06	36
01 01		02.00	314	12 00	23	49 12				01	45			31 48		32 18	36
01	45	03.00 04.00		05 24 58 12		58 12 05 24				01	45	51.00 52.00	307 307	24 36 16 12		32 31 32 42	
01		05+00		49 12 43 12	24	17 24				01 01	45 45	53.00 54.00	307	04 12 52 48		32 54	36
01		07.00				28 12				01	45	55.00		44 24		33 03 33 16	
01	45	08.00	313	37 12 30 36		37 12 45 36				01	45	56.00	306	33 36		33 30	36
01 01		09.00	313	23 24 16 48	24	57 00 07 12				01	45	57.00 58.00	306	21 36 13 48		33 40	48
01	45	11.00	313	10 48		16 4R				01 01	45 46	59.00	306	00 36		33 52 34 04	12
01		12.00		04 48		27 36				01	46			50 24		34 15	
01	45	13.00 14.00		55 48 48 36	25 25	37 45 47 24				01	46	01.00	305 305	37 48 24 00		34 30 34 41	00
01 01		15.00 16.00	312	42 00 34 48	25	57 00				01 01		03.00 04.00	305	12 36 01 12	:	34 52	12
01				_		05 24				01		05.00	304	49 12		35 06 35 16	
01	45	17.00 18.00	312	27 36 18 36		17 24 27 00				. 01		06.00	304	36 36		35 29	
01 01		19.00 20.00	312	11 24 05 24	26	37 12 48 36				01		07.00	304	23 24 12 00	. 3	35 40	48
01		21.00		55 48		57 36				01 01	46	09.00	304	01 48	3	35 53 36 07	12
01 01		22.00	311	48 00		09 36				01				47 24		36 17	
01	45	23.00 24.00		39 36 30 36	27	17 24 29 24				01	46	11.00 12.00	303 303	33 36 20 24	3	36 31 36 44	48
01 01		25.00 26.00	311	24 00 16 48	27	40 48				01 01		13.00 14.00	303	08 24 55 48	3	36 55	48
01		27.00				51 36				01		15.00	302	41 24		37 10 37 13	
01	45	28.00	311	07 48		01 48				01		16.00	302	27 36		37 30	
01 01		29.00 30.00	310	50 24 42 36	28	25 12 34 12				01 01		17.00 18.00	302	13 12 01 48	3	37 44	24
					24	24 18				01		19.00		46 48		37 57 38 <b>0</b> 9	

				17 MAY 58					
HR A	MIN SEC	AZIMUTH	ELEVATION		HR I	MIN	SEC	AZIMUTH	ELEVATION
01 4 01 4	46 20 • 00 46 21 • 00 46 22 • 00 46 23 • 00 46 24 • 00	301 24 00 301 15 36 300 52 48	38 24 36 38 37 48 38 50 24 39 03 00 39 16 48		01 01 01	47 3 47 3 47 3	0.00 1.00 2.00 3.00 4.00	276 01 48 275 28 48 274 54 36 274 24 36 273 50 24	52 37 48 52 50 24 53 00 00 53 08 24 53 19 48
01 01 01	46 25.00 46 26.00 46 27.00 46 28.00 46 29.00	300 04 12 299 49 48 299 33 00	39 26 24 39 39 36 39 52 12 40 06 00 40 17 24		01 01 01	47 3 47 3	35.00 36.00 37.00 38.00 39.00	273 19 48 272 42 00 272 15 00 271 40 48 271 07 48	53 28 48 53 36 36 53 46 12 53 57 00 54 05 24
01 01 01	46 30.00 46 31.00 46 32.00 46 33.00 46 34.00	298 46 48 298 30 36 298 15 00	40 30 36 40 45 00 40 59 24 41 10 48 41 24 00			47 47 47	40.00 41.00 42.00 43.00 44.00	270 30 36 269 57 00 269 21 36 268 46 12 268 11 24	54 12 36 54 21 36. 54 31 12 54 39 00 54 46 12
01 01 01	46 35 00 46 36 00 46 37 00 46 38 00 46 39 0	297 22 12 297 05 24 296 48 36	41 34 12 41 49 48 42 03 36 42 15 00 42 27 00		01 01 01 01 01	47 47 47	45.00 46.00 47.00 48.00 49.00	267 33 36 267 00 36 265 25 48 265 45 36 265 13 12	54 55 12 55 04 12 55 11 24 55 16 48 55 23 24
01 01 01 01 01	46 40.0 46 41.0 46 42.0 46 43.0 46 44.0	0 295 55 48 0 295 34 48 0 295 18 00	42 42 00 42 54 00 43 06 00 43 19 12 43 31 48		01 01 01 01	47	50.00 51.00 52.00 53.00 54.00	264 33 00 264 00 00 263 22 12 262 47 24 262 04 12	55 29 24 55 37 12 55 44 24 55 51 00 55 57 36
01 01 01 01	46 45.0 46 46.0 46 47.0 46 48.0 46 49.0	0 294 24 00 0 294 01 48 0 293 40 48	43 44 24 43 58 12 44 10 12 44 21 36 44 35 24		01 01 01 01 01	47 47 47 47	55.00 56.00 57.00 58.00 59.00	261 28 12 260 48 36 260 14 24 259 32 24 258 50 24	56 00 36 56 08 24 56 13 48 56 17 24 56 24 36
01 01 01 01	46 50 0 46 51 0 46 52 0 46 53 0 46 54 0	292 40 12 292 19 48 292 05 24	44 48 00 45 02 24 45 13 48 45 28 12 45 40 12		01 01 01 01	48 48 48 48	00.00 01.00 02.00 03.00 04.00	258 16 12 257 37 48 256 59 24 256 16 12 255 40 12	56 23 12 56 34 12 56 37 48 56 40 12 56 44 24
01 01 01 01 01	46 55 • 6 46 56 • 6 46 57 • 6 46 58 • 6 46 59 • 6	290 58 12 290 38 24 290 14 24	45 51 36 46 06 00 46 19 12 46 31 12 46 45 00		01 01 01 01	48 48 48 48	05.00 06.00 07.00 08.00	254 58 12 254 12 36 253 39 36 253 00 36 252 22 48	56 47 24 56 52 12 56 53 24 56 58 48 57 00 36
01 01 01 01	47 00 • 47 01 • 47 02 • 47 03 • 47 04 •	00 289 04 48 00 288 41 24 00 288 19 48	47 08 24 47 20 24 47 32 24		01 01 01 01	48 48 48 48	10.00 11.00 12.00 13.00 14.00	251 39 36 251 01 12 250 24 36 249 42 36 248 58 48	57 03 36 57 04 48 57 08 24 57 06 36 57 12 00
01 01 01 01	47 06 • 47 07 • 47 08 •	00 287 09 00 00 286 41 24 00 286 18 36	48 09 00 48 22 12 48 35 24	·	01 01 01 01	48 48 48	15.00 16.00 17.00 18.00 19.00	248 19 12 247 40 48 247 03 36 246 25 12 245 45 00	57 12 36 57 15 00 57 15 36 57 15 36 57 18 00
01 01 01 01	47 11 47 12 47 13 47 13 47 13 47	00 285 09 00 00 284 36 00 00 284 09 30	49 09 36 0 49 22 48 6 49 34 48		01 01 01 01	48 48 48	20.00 21.00 22.00 23.00 24.00	245 06 00 244 21 36 243 43 48 243 01 48 242 22 48	57 18 00 57 18 00 57 16 12
01 01 01 01	47 16 47 17 47 18	00 282 49 48 00 282 22 48	8 50 08 24 8 50 19 48 0 50 33 00		01 01 01 01	48 48 48	25.00 26.00 27.00 28.00 29.00	241 51 00 241 03 36 240 18 36 239 48 36 239 03 36	57 14 24 57 14 24 57 13 12
01 01 01 01	1 47 21 1 47 22 1 47 23		4 51 08 24 6 51 18 00 2 51 27 00		01 01 01 01	1 48 1 48 1 48	32.00 33.00	238 27 36 237 48 36 237 10 48 236 31 12 235 52 48	57 07 12 57 04 48 57 02 24
01 01 01 01	1 47 26 1 47 27 1 47 28	•00 278 37 4 •00 278 09 3 •00 277 33 3 •00 277 06 0 •00 276 35 2	6 51 59 24 6 52 10 12 0 52 19 48		0:	1 48 1 48 1 48	35.00 36.00 37.00 38.00 39.00	235 15 36 234 39 00 233 59 24 233 24 30 232 45 30	56 54 00 4 56 51 00 6 56 47 24

					21 1151 20					
HR	MIN	SEC	A2 IMUTH	ELEVATION		НЯ	R MI	N SEC	AZIMUTH	ELEVATION
01 01 01 01	48 48 48	40.00 41.00 42.00 43.00 44.00	232 09 00 231 31 48 230 54 36 230 18 36 229 42 36	56 40 12 56 36 36 56 33 36 56 29 24 56 24 00		0:	1 49 1 49 1 49	51.00 52.00 53.00	200 29 24 200 09 36 199 54 00 199 35 24 199 16 48	47 31 12 47 25 12 47 16 48 47 07 12 46 55 12
01 01 01 01	48 48 48	45.00 46.00 47.00 48.00 49.00	229 06 00 228 28 12 227 51 00 227 19 48 226 48 00	56 19 48 56 16 12 56 12 36 56 12 00 55 57 36		0 0 0 0	1 49 1 49 1 49	56.00 57.00 58.00	198 57 36 198 40 48 198 26 24 198 11 24 197 55 48	45
01 01 01 01	48 1 48 1 48	50.00 51.00 52.00 53.00 54.00	226 13 48 225 43 48 225 06 36 224 34 12 224 00 00	55 54 00 55 48 36 55 43 12 55 36 36 55 31 12			1 5	0 01.00 0 02.00 0 03.00	197 37 48 197 18 36 197 01 48 196 47 24 196 33 36	45 57 36 45 48 00 45 39 36 45 28 48 45 19 12
0	1 48 1 48 1 48	55.00 56.00 57.00 58.00 59.00	223 28 48 222 47 24 222 20 24 221 51 36 221 15 00	55 22 48 55 18 00 55 12 00 55 04 48 54 58 12		0	1 5		196 16 48 196 02 24 195 45 36 195 30 36 195 15 36	45 09 00 45 00 36 44 51 00 44 41 24 44 32 24
0	1 49	00.00 01.00 02.00 03.00 04.00	220 40 12 220 08 24 219 40 12 219 09 36 218 30 00	54 51 00 54 45 00 54 36 36 54 28 48 54 21 36			01 5 01 5	0 10.00 0 11.00 0 12.00 0 13.00	195 03 00 194 49 12 194 37 48 194 23 24 194 09 00	44 21 36 44 12 00 44 01 12 43 52 48 43 45 00
0	1 49 1 49 1 49 1 49 1 49	08.00	218 04 12 217 45 00 217 06 36 216 41 24 216 11 24	54 16 12 54 09 36 54 01 48 53 52 12 53 43 48			01 01 01	50 15.00 50 16.00 50 17.00 50 18.00 50 19.00	193 55 48 193 42 36 193 28 48 193 13 48 193 04 12	43 34 12 43 24 36 43 14 24 43 06 00 42 57 36
0	01 49 01 49 01 49 01 49	11.00 12.00 13:00	215 44 24 215 17 24 214 46 12 214 18 36 213 52 12	53 37 12 53 28 12 53 19 48 53 13 12 53 04 12			01 01 01	50 20.00 50 21.00 50 22.00 50 23.00 50 24.00	192 49 12 192 36 36 192 24 00 192 12 00 191 58 48	42 47 24 42 38 24 42 30 36 42 19 48 42 10 48
(	01 49 01 49 01 49 01 49 01 49	16.00 17.00 18.00	213 24 36 212 56 24 212 32 24 212 03 36 211 37 12	52 55 48 52 46 12 52 37 48 52 30 00 52 21 00			01 01 01	50 25.00 50 26.00 50 27.00 50 28.00 50 29.00	191 46 12 191 36 36 191 21 36 191 09 36 190 58 48	42 C1 12 41 50 24 41 42 00 41 33 36 41 24 00
	01 49 01 49 01 49 01 49	21.00 22.00 23.00	211 13 12 210 46 12 210 19 12 209 56 24 209 33 36	52 06 36 51 56 24 51 45 00				50 30.00 50 31.00 50 32.00 50 33.00 50 34.00	190 47 24 190 36 00 190 25 48 190 15 00 190 03 00	40 56 24 40 48 00
	01 4 01 4 01 4 01 4 01 4	9 26.00 9 27.00 9 28.00	209 04 12 208 52 48 208 22 12 207 57 36 207 34 48	51 19 48 51 10 48 51 02 24			01 01 01 01 01	50 35.00 50 36.00 50 37.00 50 38.00 50 39.00	189 52 48 189 40 12 189 29 24 189 18 60 189 11 24	40 22 12 40 13 12 40 03 00
	01 4 01 4	9 31.00	207 12 36 206 52 12 206 27 36 206 03 36 205 43 12	50 34 12 50 27 00 50 16 12			01 01 01 01	50 40.00 50 41.00 50 42.00 50 43.00 50 44.00	188 49 48 188 38 24 188 28 48	39 36 00 39 28 48 39 18 36
	01 4 01 4		205 21 30 205 02 20 204 41 20 204 18 0 203 57 3	4 49 48 00 4 49 37 48 0 49 29 24			01 01 01 01 01	50 45.00 50 46.00 50 47.00 50 48.00 50 49.00	187 59 24 187 49 46 187 39 3	4 38 52 46 3 38 44 24 6 38 34 48
	01 4 01 4	40.00 41.00 49 42.00 49 43.00 49 44.00	203 19 1 202 58 1 202 37 1	2 49 02 24 2 48 52 12 2 48 43 48			01 01 01 01 01	50 50.00 50 51.00 50 52.00 50 53.00 50 54.00	187 09 3 187 01 4 186 54 3	6 38 09 00 8 38 01 12 6 37 55 48
	01		201 37 1 201 22 4 201 01 1	48 13 12 8 48 04 12 12 47 53 24			01 01 01 01	50 55.00 50 56.00 50 57.00 50 58.00 50 59.00	186 26 2 186 16 4 186 09 0	4 37 26 24 8 37 18 36 0 37 10 48

		17 MAY 58		
HR MIN SEC	AZIMUTH ELEVATION		HR MIN SEC	AZIMUTH ELEVATION
01 51 00.00	185 49 48 36 53 24		01 52 10.00	175 30 00 28 20 24
01 51 01.00	185 42 36 36 44 24		01 52 11.00	178 24 36 28 12 36
01 51 02.00	185 34 12 36 39 00		01 52 12.00	178 19 12 28 06 36
01 51 03.00	185 25 48 36 30 00		01 52 13.00	178 13 48 28 01 12
01 51 04.00	185 17 24 36 21 36		01 52 14.00	178 08 24 27 52 48
01 51 05.00 01 51 06.00 01 51 07.00 01 51 08.00 01 51 09.00	185 11 24 36 12 00 185 02 24 36 03 00 184 55 4e 35 56 24 184 47 24 35 49 12 134 39 36 35 40 12		01 52 15.00 01 52 16.00 01 52 17.00 01 52 18.00 01 52 19.00	178 03 36
01 51 10.00	184 31 12 35 31 12		01 52 20.00	177 43 48 27 14 24
01 51 11.00	184 22 12 35 23 24		01 52 21.00	177 38 24 27 09 00
01 51 12.00	184 14 24 35 15 36		01 52 22.00	177 35 24 27 02 24
01 51 13.00	184 07 12 35 06 36		01 52 23.00	177 30 00 26 57 00
01 51 14.00	183 59 24 35 00 00		01 52 24.00	177 25 12 26 50 24
01 51 15.00	183 51 36 34 52 12		01 52 25.00	177 22 12 26 44 24
01 51 16.00	183 46 12 34 44 24		01 52 26.00	177 18 00 25 37 48
01 51 17.00	183 38 24 34 37 48		01 52 27.00	177 14 24 26 30 36
01 51 18.00	183 30 00 34 27 36		01 52 28.00	177 09 36 26 25 12
01 51 19.00	183 22 12 34 21 00		01 52 29.00	177 06 00 26 18 00
01 51 20 • 00	183 15 36 34 13 12		01 52 30.00	177 00 36 26 09 36
01 51 21 • 00	183 08 24 34 05 24		01 52 31.00	176 57 36 26 06 36
01 51 22 • 00	183 01 48 33 56 24		01 52 32.00	176 52 48 26 02 24
01 51 23 • 00	182 55 12 33 49 12		01 52 33.00	176 48 36 25 55 48
01 51 24 • 00	182 47 24 33 43 48		01 52 34.00	176 45 36 25 49 48
01 51 25.00	182 40 48 33 34 48		01 52 35.00	176 42 00 25 43 12
01 51 26.00	182 34 48 33 25 48		01 52 36.00	176 36 36 25 37 48
01 51 27.00	182 28 12 33 19 48		01 52 37.00	176 31 48 25 33 00
01 51 28.00	182 19 48 33 12 00		01 52 38.00	176 28 48 25 27 36
01 51 29.00	182 13 48 33 04 48		01 52 39.00	176 25 12 25 22 12
01 51 30.00	182 08 24 32 56 24		01 52 40.00	176 22 12 25 16 12
01 51 31.00	182 00 00 32 49 48		01 52 41.00	176 19 12 25 16 12
01 51 32.00	131 57 00 32 42 36		01 52 42.00	176 15 36 25 03 36
01 51 33.00	131 50 24 32 34 12		01 52 43.00	176 09 36 24 58 12
01 51 34.00	131 45 00 32 26 24		01 52 44.00	176 06 36 24 52 48
01 51 35.00	181 37 48 32 19 48		01 52 45.00	176 03 00 24 46 12
01 51 36.00	181 30 00 32 12 00		01 52 46.00	175 59 24 24 42 00
01 51 37.00	131 24 00 32 03 36		01 52 47.00	175 54 36 24 37 48
01 51 38.00	191 19 48 31 57 36		01 52 48.00	175 51 36 24 30 36
01 51 39.00	181 12 36 31 51 36		01 52 49.00	175 48 00 24 24 36
01 51 40.00	181 07 12 31 43 12		01 52 50.00	175 43 48 24 19 12
01 51 41.00	181 01 48 31 34 48		01 52 51.00	175 40 12 24 13 12
01 51 42.00	180 55 48 31 28 48		01 52 52.00	175 36 36 24 08 24
01 51 43.00	180 49 12 31 21 36		01 52 53.00	175 33 36 24 02 24
01 51 44.00	180 43 48 31 15 00		01 52 54.00	175 30 00 23 55 48
01 51 45.00 01 51 46.00 01 51 47.00 01 51 48.00 01 51 49.00	180 31 48 31 00 36 180 25 48 30 51 00 120 22 48 30 44 24		01 52 55.00 01 52 56.00 01 52 57.00 01 52 58.00 01 52 59.00	175 25 48 23 49 48 175 24 00 23 44 24 175 20 24 23 40 12 175 17 24 23 34 48 175 13 48 23 28 12
01 51 50.00 01 51 51.00 01 51 52.00 01 51 53.00 01 51 54.00	180 04 12 30 25 12 179 57 36 30 18 36 179 52 48 30 13 12		01 53 00.00 01 53 01.00 01 53 02.00 01 53 03.00 01 53 04.00	175 07 12 23 16 48 175 04 12 23 12 00 175 00 00 23 04 48
01 51 55•00 01 51 56•00 01 51 57•00 01 51 58•00 01 51 59•00	179 37 48 29 51 00 179 33 00 29 44 24 179 27 36 29 38 24		01 53 05.00 01 53 06.00 01 53 07.00 01 53 08.00 01 53 09.00	174 51 00 22 52 12 174 47 24 22 46 12 174 43 48 22 41 24
01 52 00+00 01 52 01+00 01 52 02+00 01 52 03+00 01 52 04+00	0 179 10 12 29 18 36 0 179 06 36 29 12 00 0 179 01 48 29 05 24		01 53 10.00 01 53 11.00 01 53 12.00 01 53 13.00 01 53 14.00	174 34 12 22 24 00 174 33 00 22 19 12 174 28 48 22 13 48
01 52 05.00 01 52 06.00 01 52 07.00 01 52 08.00 01 52 09.0	0 178 47 24 28 46 12 0 178 41 24 28 39 36 0 178 37 12 28 33 00	! ; )	01 53 15.00 01 53 16.00 01 53 17.00 01 53 18.00 01 53 19.00	0 174 19 12 22 01 12 0 174 16 48 21 55 48 0 174 13 48 21 49 12

PATRICK AFB	THE00. STA. 1.20	LAT. 28 31 29 N	LONG. 279 26 21 E	HT 0011 M

HR	MIN	SEC	AZIMUTH	ELEVATION	НR	MIN	SEC	AZIMUTH	ELEVATION
01	53	20.00	174 07 48	21 39 00	01	53	37.00	173 21 36	20 13 12
01	53	21.00	174 04 48	21 33 00	01	53	38.00	173 19 12	20 09 36
01	53	22.00	174 01 48	21 27 00	01	53	39.00	173 16 12	20 04 48
01	53	23.00	174 00 00	21 23 24	01	53	40.00	173 13 48	20 00 36
01	53	24.00	173 57 00	21 23 24	01	53	41.00	173 12 36	19 54 36
01	5.3	25 • 00	173 54 00	21 13 48	01	53	42.00	173 10 12	19 49 48
01	53	26 • 00	173 51 00	21 07 48	01	53	43.00	173 07 48	19 43 48
01	53	27.00	173 48 00	21 01 48	01	53	44.00	173 04 48	19 38 24
01	53	28 • 00	173 44 24	20 57 36	01	53	45.00	172 59 24	19 32 24
01	53	29.00	173 42 00	20 51 36	01	53	46.00	172 54 36	19 24 00
01	53	30.00	173 39 00	20 46 48	01	53	47.00	172 53 24	19 14 24
01	53	31.00	173 36 00	20 42 36	01	53	48.00	172 48 36	19 07 48
01	53	32.00	173 33 00	20 37 48	01	53	49.00	172 43 12	19 00 36
01	53	33.00	173 30 36	20 31 12	01	53	50.00	172 28 12	18 54 00
01	53	34.00	173 28 12	20 27 36	01	53	51.00	172 26 24	18 48 00
01	53	35 • 00	173 26 24	20 22 48	01	53	52.00	172 26 24	18 40 12
01	53	36 • 00	173 24 00	20 19 12					

	PA	TRICK AFB	THEOD. STA. 1.50	LAT. 28 24 29 N	LONG. 279 24 09	Е НТ 0012 М
				17 MAY 58		
HR	MIN	SEC	AZIMUTH ELEVATION		HR MIN SEC	AZIMUTH ELEVATION
01		02•00	242 33 00 53 10 12		01 38 47.00	219 00 00 49 58 12
01		03 • 00 04 • 00	242 15 36 53 03 36 241 15 36 52 58 12		01 38 48.00 01 38 49.00	218 37 48 49 52 48 218 16 48 49 45 36
01	38	05 • 00	241 08 24 52 58 12		01 38 50.00	217 50 24 49 37 48
01	38	06•00	239 22 12 53 00 00		01 38 51.00	217 27 36 49 29 24
01	38	07 • 00	238 57 36 53 03 00		01 38 52.00	217 00 36 49 25 48
01 01	38 38	08 • 00	238 41 24 52 55 12 238 19 48 52 51 36		01 38 53.00 01 38 54.00	216 37 12 49 18 00 216 14 24 49 11 24
01	38	10.00	237 35 24 52 47 24		01 38 55.00	215 46 48 49 03 36
01	38	11.00	236 48 36 52 44 24		01 38 56.00	215 21 36 49 52 48
01	38	12.00	236 10 12 52 42 00		01 38 57.00	215 00 36 48 49 48
01 01	38 38	13.90 14.00	235 38 24 52 40 12 235 08 24 52 39 36		01 38 58.00 01 38 59.00	214 40 12 48 40 48 214 16 12 48 33 36
01	38	15.00	234 33 36 52 38 24		01 39 00.00	213 53 24 48 24 00
01	38	16.00	234 04 48 52 34 12		01 39 01.00	213 27 36 48 20 24
01	38	17.00	233 33 00 52 31 12		01 39 02:00	213 05 24 48 10 48
01	38 38	18.00 19.00	232 58 48 52 25 12 232 27 36 52 24 03		01 39 03.00 01 39 04.00	
01	38	20.00	231 57 00 52 23		01 39 04.00	
01	38	21.00	231 16 48 52 18 07		01 39 06•00	211 39 00 47 45 36
01	38	22.00	230 51 00 52 16 48		01 39 07.00	
01 01	38 38	23.00 24.00	230 18 36 52 11 24 229 52 48 52 09 00		01 39 08.00 01 39 09.00	
01	38	25.00	229 25 12 52 08 24		01 39 10.00	210 16 48 47 12 00
01	38	26.00	228 51 00 52 02 24		01 39 11.00	209 56 24 47 03 36
01		27.00	228 19 12 51 49 13		01 39 12•00	
01 01		28 • 00 29 • 00	227 42 36 51 45 00 227 13 12 51 41 24		01 39 13•00 01 39 14•00	
01		30.00	226 38 24 51 39 00		01 39 15.00	
01	38	31.00	226 13 12 51 31 4		01 39 16.0	208 14 24 46 24 16
01		32.00	225 47 24 51 27 3		01 39 17.0	
01		33.00 34.00	225 27 36 51 23 2 224 55 48 51 15 3		01 39 18.00 01 39 19.0	
01	38	35.00	224 27 36 51 08 2	•	01 39 20.0	206 49 12 45 54 36
01	L 38	36.00	223 58 48 51 03 0	)	01 39 21.0	206 35 24 45 45 36
0			223 31 12 50 57 3 223 07 12 50 52 4		01 39 22.0 01 39 23.0	
0 2			222 39 36 50 47 2		01 39 24.0	
O:	1 38	40.00	222 11 24 50 40 1	2	01 39 25.0	0 205 15 00 45 12 36
0	1 38	41.00	221 41 24 50 34 1	č	01 39 26.0	0 205 03 36 45 01 48
0			221 15 00 50 27 0		01 39 27.0	
0			220 49 48 50 25 1 220 25 12 50 19 4		01 39 28.0 01 39 29.0	
0	1 36	45.00	219 58 12 50 11 2	4	01 39 30.0	0 203 58 12 44 28 48
0	1 38	46.00	219 29 24 50 04 4	8	01 39 31.0	0 203 48 00 44 20 24

		17 MAY 58					
HR MIN SEC	AZIMUTH ELEVATION		HR	MIN S	SEC	AZIMUTH	ELEVATION
01 39 32.00 01 39 33.00 01 39 34.00 01 39 35.00 01 39 36.00	203 28 48 44 15 00 203 07 48 44 09 36 202 51 36 44 00 36 202 37 12 43 48 36 202 10 48 43 40 48		01 01 01 01 01	40 42	3.00 1 4.00 1 5.00 1	189 18 00 189 12 00 189 00 36 188 52 48 188 45 00	34 38 24 34 28 48 34 18 00 34 13 48 34 09 00
01 39 37.00 01 39 38.00 01 39 39.00 01 39 40.00 01 39 41.00	201 48 36 43 33 00 201 45 36 43 19 48 201 33 00 43 10 12 201 15 00 43 03 36 200 55 48 42 56 24		01 01 01 01	40 40 40 40	8.00 9.00 0.00	188 35 24 138 26 24 188 21 00 188 12 36 188 04 48	34 04 48 33 59 24 33 55 12 33 52 12 33 49 12
01 39 42.00 01 39 43.00 01 39 44.00 01 39 45.00 01 39 46.00	200 39 36 42 49 12 200 28 48 42 40 48 200 03 00 42 33 36 199 50 24 42 25 48 199 34 12 42 13 48		01 01 01 01	40 5 40 5 40 5	3.00 4.00 5.00	187 54 00 187 44 24 187 36 00 187 25 12 187 21 00	33 46 12 33 44 24 33 38 24 33 19 12 33 06 36
01 39 47.00 01 39 48.00 01 39 49.00 01 39 50.00 01 39 51.00	199 25 48 42 01 12 199 15 00 41 50 24 199 02 24 41 45 36 198 47 24 41 48 36 198 36 36 41 42 00		01 01 01 01	. 40 5 . 40 5 . 41 0	8.00	187 10 48 187 06 00 186 56 24 186 42 00 186 35 24	32 57 36 32 54 36 32 53 24 32 46 12 32 38 24
01 39 52.00 01 39 53.00 01 39 54.00 01 39 55.00 01 39 56.00	198 21 36 41 31 48 198 01 48 41 20 24 197 44 24 41 12 00 197 29 24 41 09 00 197 26 24 40 58 12		01 01 01 01	1 41 0 1 41 0 1 41 0	02.00 03.00 04.00 05.00	186 37 12 186 29 24 186 25 12 186 21 36 186 21 00	32 28 12 32 15 00 32 05 24 31 57 36 32 01 12
01 39 57.00 01 39 58.00 01 39 59.00 01 40 00.00 01 40 01.00	197 15 00 40 46 12 197 03 36 40 44 24 196 57 36 40 37 12 196 42 00 40 16 12 196 32 24 40 00 00		0:00	1 41 9 1 41 9 1 41	07.00 08.00 09.00 10.00	186 10 12 185 59 24 185 47 24 185 39 36 185 33 36	31 57 36 31 50 24 31 42 36 31 34 12 31 25 48
01 40 02+00 01 40 03+00 01 40 04+00 01 40 05+00 01 40 05+00	196 19 48 39 53 48 196 01 48 39 53 48 195 47 24 39 50 24 195 33 36 39 43 48 195 22 48 39 34 48		0 0 0 0	1 41 1 41 1 41	12.00 13.00 14.00 15.00	185 26 24 185 18 36 185 13 48 185 08 24 185 01 48	31 19 12 31 14 24 31 04 12 30 58 12 30 51 00
01 40 07.00 01 40 08.00 01 40 09.00 01 40 10.00 01 40 11.00	195 09 36 39 25 48 194 58 48 39 16 46 194 48 00 39 10 12 194 34 12 39 05 24 194 25 48 38 52 48		0	1 41	17.00 18.00 19.00 20.00 21.60	184 55 12 184 49 12 184 43 12 184 34 12 184 28 48	30 44 24 30 38 24 30 34 48 30 27 36 30 19 12
01 40 12.00 01 40 13.00 01 40 14.00 01 40 15.00 01 40 16.00	194 16 12 38 48 00 194 03 36 38 37 48 193 54 00 38 30 00 193 45 36 38 24 00 193 29 24 38 18 00		0	01 41 01 41 01 41 01 41 01 41	22.00 23.00 24.00 25.00 26.00	184 24 00 184 15 00 184 09 36 184 03 36 183 58 48	30 16 12 30 10 48 30 08 24 30 07 12 30 03 36
01 40 17.00 01 40 18.00 01 40 19.00 01 40 20.00 01 40 21.00	193 18 36 38 12 36 193 07 12 38 07 48 192 56 24 37 55 48 192 44 24 37 37 48 192 33 00 37 28 48		(	01 41 01 41 01 41 01 41 01 41	27.00 28.00 29.00 30.00 31.00	183 53 24 183 48 00 183 42 00 183 31 12 183 24 00	29 47 24 29 37 12 29 27 36 29 13 36 29 13 12
01 40 22*00 01 40 23*00 01 40 24*00 01 40 25*00 01 40 26*00	192 23 24 37 16 48 192 15 00 37 20 24 192 00 36 37 18 00 191 46 12 37 07 12 191 37 12 36 56 24		Ш	01 41 01 41 01 41 01 41 01 41	32.00 33.00 34.00 35.00 36.00	183 18 00 183 14 24 183 08 24 183 03 36 182 57 36	29 03 36 28 54 36
01 40 27•00 01 40 28•00 01 40 29•00 01 40 30•00 01 40 31•00	191 26 24 36 52 48 191 24 00 36 38 24 191 15 36 36 33 0 191 08 24 36 29 24 191 01 12 36 13 48			01 41 01 41 01 41 01 41 01 41	37.00 38.00 39.00 40.00 41.00	182 52 48 182 46 48 182 39 36 182 33 00 182 25 12	28 21 00 28 13 48
01 40 32.00 01 40 33.00 01 40 34.00 01 40 35.00 01 40 36.00	190 54 36 36 06 36 190 43 48 36 00 00 190 33 00 35 54 00 190 22 48 35 46 11 190 12 00 35 38 26	) ) !		01 41 01 41 01 41 01 41 01 41	42.00 43.00 44.00 45.00 46.00	182 23 24 182 18 36 182 13 48 182 08 24 182 02 24	27 54 36 27 46 12 27 42 00
01 40 37.00 01 40 38.00 01 40 39.00 01 40 40.00 01 40 41.00	189 43 48 35 07 4 189 35 24 34 58 1	) 3 2		01 41 01 41 01 41 01 41 01 41	50.00	181 57 00 181 52 12 181 47 24 181 41 24 181 34 12	27 26 24 27 21 36 27 17 24

PATRICK AFB THEOD. STA. 1.50 LAT. 28 24 29 N LONG. 279 24 09 E HT 0012 M

				17	MAY 58				
HR	MIN	SEC	A2 IMUTH	ELEVATION	HR	MIN	SEC	A2 IMUTH	ELEVATION
01	41	52.00	181 33 00	27 05 24	01	42	28.00	178 46 48	23 40 48
01	41	53.00	181 28 12	27 00 00	01	42	29.00	178 45 36	23 37 12
01	41	54.00	181 23 24	26 52 12	01	42	30.00	178 43 48	23 31 12
01	41	55.00	181 18 36	26 45 36	01	42	31.00	178 42 00	23 24 00
01	41	56.00	181 12 00	26 40 48	31	42	32.00	178 37 12	23 18 36
01	41	57.00	181 07 48	26 33 36	01	42	33.00	178 34 12	23 12 36
01	41	58.00	181 04 12	26 26 24	01	42	34.00	178 29 24	23 06 36
01	41	59.00	180 58 48	26 20 24	01	42	35.00	178 25 12	23 01 48
01	42	00 • 00	180 54 36	26 15 36	01	42	36.00	178 21 36	22 57 00
01	42	01.00	180 51 36	26 12 00	01	42	37.00	178 18 36	22 51 00
01	42	02 • 00	180 47 24	26 04 48	01	42	38.00	178 15 00	22 46 12
01	42	03.00	180 42 00	25 59 24	01	42	39.00	178 11 24	22 42 00
91	42	04.00	180 39 36	25 55 48	01	42	40.00	178 07 48	22 39 00
01	<b>₹</b> 2	05.00	180 33 00	25 47 24	01	42	41.00	178 04 48	22 34 48
01	42	06.00	180 28 12	25 45 00	01	42	42.00	178 00 36	22 30 36
01	42	07.00	180 24 00	25 42 00	01	42	43.00	177 56 24	22 27 00
01	42	03.00	180 18 36	25 34 12	01	42	44.00	177 52 12	22 18 00
01	42	09 • 00	180 16 12	25 25 48	01	42	45.00	177 49 12	22 13 12
01	42	10.00	180 12 00	25 19 48	01	42	46.00	177 43 12	22 09 00
01	42	11.00	180 07 48	25 11 24	01	42	47.00	177 39 00	22 05 24
01	42	12.00	180 05 24	25 06 36	01		48.00	177 37 12	22 00 00
91	42	13.00	180 01 12	25 00 36	01			177 34 48	21 55 48
01	42	14.00	179 54 36	24 57 36	01			177 31 12	21 49 48
01	42	15.00	179 48 36	24 53 24	01			177 26 24	21 42 00
01	42	16.00	179 43 12	24 39 36	01	42	52.00	177 21 36	21 37 12
01	42	17.00	179 37 12	24 34 12	01	42	53.00	177 18 36	
01		18.00	179 33 00	24 29 24	01			177 15 00	
01	42	19.00	179 29 24	24 27 00	01			177 10 48	
01			179 25 48	24 22 12	01			177 07 48	
91	42	21.00	179 22 48	24 17 24	01	. 42	57.00	177 03 36	21 13 12
01			179 21 00	24 11 24	0:			177 01 48	
01			179 16 12	24 06 36	0;			177 01 12	
01			179 09 00	24 03 00	0:			176 59 24	
01			179 04 48	23 58 48	0;			176 53 24	
01	42	26.00	178 58 48	23 53 24	0;	1 43	02.00	176 47 24	21 01 12
01	42	27.00	178 52 48	23 45 00	0	1 43	03.00	176 43 12	21 01 12

PATRICK AF8 THEOD. STA. 1.40 LAT. 28 27 58 N LONG. 279 24 38 E HT 0010 M 17 MAY 58 **A2IMUTH** ELEVATION HR MIN SEC AZ1MUTH ELEVATION HR MIN SEC 23.00 192 13 48 37 09 36 01 40 48.00 188 25 12 33 58 12 191 59 24 191 50 24 191 43 12 37 01 12 36 50 24 36 45 00 33 51 00 33 45 00 33 38 24 01 40 24.00 25.00 01 40 40 49.00 188 17 24 188 09 00 01 40 01 01 26.00 51.00 187 58 12 01 40 27.00 191 33 00 36 37 12 01 40 52.00 187 52 48 33 28 48 01 40 28.00 191 22 48 36 28 12 01 40 53.00 187 45 00 33 22 48 187 36 36 187 30 36 187 21 00 187 15 36 33 14 24 33 08 24 33 01 12 191 12 36 191 03 36 54.00 55.00 01 40 29.00 36 21 36 01 40 40 30.00 31.00 32.00 36 21 36 36 09 00 35 **57** 36 01 01 40 190 54 00 56.00 01 40 01 40 190 43 12 Õī 40 57.00 32 54 36 35 50 24 35 42 36 35 34 12 35 27 36 35 21 90 187 07 12 186 58 48 186 51 36 01 40 01 40 33.00 190 34 12 190 25 48 01 40 40 41 58.00 59.00 32 48 00 32 40 12 32 33 00 01 01 34+00 190 16 48 40 35 .00 01 00.00 01 40 36.00 37.00 190 06 24 189 57 00 01 41 41 01.00 186 43 48 32 26 24 02.00 186 36 36 32 18 36 189 49 12 189 40 12 189 33 36 35 14 24 35 07 48 34 59 24 41 41 41 01 40 38.00 01 03.00 186 31 12 32 12 36 01 40 39.00 01 04.00 186 22 48 186 16 12 186 09 00 32 04 12 31 58 48 01 01 40 40.00 ¢1 40 41.00 189 25 48 34 50 24 01 31 52 12 06.00 01 40 42.00 189 15 36 34 43 12 01 41 07.00 186 01 48 185 53 24 185 47 24 185 40 48 185 34 12 185 27 00 01 40 43.00 189 07 48 34 36 36 01 41 01 41 08.00 31 36 36 31 30 36 31 22 48 31 18 00 31 10 12 34 28 12 34 20 24 34 13 48 09.00 40 44.00 188 57 36 188 49 48 41 41 41 01 01 40 01 188 42 36 46.00 11.00 01 47.00

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	PA	TRICK AFE	B THEOD. STA. 1.40		LONG. 279 24 38 E	HT C010 M
HR	MIN	SEC	AZIMUTH ELEVATION	17 MAY 58	HR MIN SEC	AZIMUTH ELEVATION
01 01 01 01 01	41	13.00 14.00 15.00 16.00 17.00	185 25 48 31 04 12 185 12 36 30 58 12 185 07 12 30 52 12 184 59 24 30 44 24 184 55 12 30 36 36	·	01 42 08.00 01 42 09.00 01 42 10.00 01 42 11.00 01 42 12.00	180 19 48 25 25 12 180 14 24 25 19 12 180 10 12 25 13 12 180 06 36 25 07 12 180 00 36 25 00 36
01 01 01 01	41 41 41 41 41	18.00 19.00 20.00 21.00 22.00	184 48 00 30 30 36 184 41 24 30 23 24 184 36 00 30 16 12 184 31 12 30 12 00 164 23 24 30 04 12		01 42 13.00 01 42 14.00 01 42 15.00 01 42 16.00 01 42 17.00	179 57 00 24 55 12 179 53 24 24 48 36 179 49 12 24 44 24 179 42 36 24 39 00 179 40 12 24 39 00
01 01 01 01	41 41 41 41	23.00 24.00 25.00 26.00 27.00	184 16 12 29 58 12 184 11 24 29 50 24 184 03 36 29 45 00 183 57 00 29 38 24 183 52 12 29 32 24		01 42 18.00 01 42 19.00 01 42 20.00 01 42 21.00 01 42 22.00	179 36 00 24 31 12 179 32 24 24 19 48 179 28 12 24 14 24 179 24 36 24 08 24 179 19 12 24 04 48
01 01 01 01	41 41 41 41 41	28.00 29.00 30.00 31.00 32.00	183 46 12 29 26 24 183 4C 12 29 18 00 183 34 12 29 11 24 183 28 48 29 04 12 183 22 12 28 59 24		01 42 23.00 01 42 24.00 01 42 25.00 01 42 26.00 01 42 27.00	179 16 12 23 59 24 179 12 00 23 52 48 179 08 24 23 48 36 179 03 36 23 44 24 178 58 48 23 39 36
01 01 01 01	41 41 41 41	33.00 34.00 35.00 36.00 37.00	183 17 24 28 53 24 183 10 48 28 47 24 183 04 12 28 40 48 183 00 00 28 33 36 182 54 00 28 27 36		01 42 28.00 01 42 29.00 01 42 30.00 01 42 31.00 01 42 32.00	178 54 36 23 33 36 178 50 24 23 27 00 178 46 48 23 23 24 178 42 36 23 16 48 178 39 36 23 12 00
01 01 01 01	41 41	38.00 39.00 40.00 41.00 42.00	182     48     00     28     22     12       182     41     24     28     14     24       132     36     36     28     08     24       182     31     48     28     01     12       182     25     12     27     56     24		01 42 33.00 01 42 34.00 01 42 35.00 01 42 36.00 01 42 37.00	178 34 48 23 07 48 178 31 12 23 02 24 178 28 12 22 57 00 178 24 36 22 52 48 178 19 46 22 46 48
01 01 01 01	41 41 41	43:00 44:00 45:00 46:00 47:00	182 19 48 27 50 24 182 16 48 27 44 24 182 11 24 27 37 48 182 05 24 27 32 24 182 01 12 27 25 12		01 42 38.00 01 42 39.00 01 42 40.00 01 42 41.00 01 42 42.00	178 17 24 22 42 00 178 13 12 22 36 36 178 09 00 22 31 12 178 05 24 22 26 24 178 02 24 22 21 36
01 01 01 01	41 41 41	48.00 49.00 50.00 51.00 52.00	181 55 48 27 19 48 181 49 43 27 13 48 181 45 36 27 07 48 181 40 12 .27 00 36 181 35 24 26 55 48		01 42 43.00 01 42 44.00 01 42 45.00 01 42 46.00 01 42 47.00	177 58 12 22 16 48 177 54 00 22 12 36 177 51 00 22 05 24 177 48 00 22 01 12 177 44 24 21 55 48
0:	41 41 1 41	54 • 00 55 • 00 56 • 00	181 28 48 26 50 24 181 23 24 26 45 36 181 20 24 26 39 00 181 15 00 26 33 00 181 10 12 26 27 00		01 42 48.00 01 42 49.00 01 42 50.00 01 42 51.00 01 42 52.00	177 40 48 21 49 48 177 37 12 21 44 24 177 34 12 21 39 36 177 29 24 21 34 48 177 25 48 21 30 00
C	1 41 1 42 1 42	58.00 59.00 00.00 01.00 2 02.00	181 06 36 26 21 00 181 01 48 26 15 00 180 55 48 26 07 12 180 52 48 26 03 00 180 46 48 25 57 36	) : )	01 42 53.00 01 42 54.00 01 42 55.00 01 42 56.00 01 42 57.00	177 21 CO 21 25 12 177 17 24 21 19 12 177 14 24 21 15 00 177 11 24 21 08 24 177 09 00 21 04 12
0	1 4:	2 03.00 2 04.00 2 05.00 2 06.00 2 07.00	180 42 36 25 51 00 180 37 48 25 44 20 180 33 36 25 38 20 180 28 12 25 33 31 180 23 24 25 28 4	• • 5	01 42 58.00 01 42 59.00 01 43 00.00 01 43 01.00	177 03 36 21 00 36 176 59 24 20 58 12 176 52 12 20 57 36 176 45 36 20 57 00
		PATRICK	AFB THEOD. STA. 1.3	LAT. 28 16 17 17 MAY 58	N LONG. 279 23 37	E HT 0005 M
		IN SEC	AZIMUTH ELEVATI	ON	HR MIN SEC	AZIMUTH ELEVATION
	01 4 01 4 01 4	4 43.00 4 44.00 4 45.00 4 46.00 4 47.00	316 40 12 22 43 1 316 39 00 22 45 3 316 39 36 22 45 3	2 6 6	01 44 50.00 01 44 51.00 01 44 52.00 01 44 53.00 01 44 54.00	316 15 00 21 31 12 316 16 12 21 32 24 316 15 00 22 06 00
		4 48 00			01 44 55.00 01 44 56.00	316 16 12 22 32 24 316 16 12 22 39 00

HR M	IN SEC	AZIMUTH	ELEVATION		HR MIN	SEC	AZIMUTH	ELEVATION
01 · 4· 01 · 4· 01 · 4· 01 · 4· 01 · 4·	4 58.00 4 59.00 5 00.00	315 10 48 315 45 36 315 41 24 315 37 12 315 36 36	22 45 00 22 46 48 22 46 12 23 15 00 23 24 36		01 46 01 46 01 46 01 46 01 46	20.00 21.00 22.00 23.00 24.00	303 04 48 302 51 00 302 39 00 302 24 00 302 10 12	38 02 24 38 16 36 38 31 12 38 46 48 38 57 00
01 4	5 03.00 5 04.00	315 07 12 314 57 00 314 51 36 314 46 48 314 42 00	23 30 36 23 43 12 23 54 00 24 04 48 24 12 36		01 46 01 46 01 46 01 46 01 46	25.00 27.00 28.00 29.00 30.00	301 57 00 301 28 48 301 14 24 300 57 36 300 41 24	39 07 12 39 36 00 39 49 48 40 01 12 40 14 24
01 4 01 4 01 4	07.00 09.00 05.09.00 05.10.00 05.11.00	314 36 36 314 21 36 314 14 24 314 07 48 314 00 00	24 24 36 24 39 00 24 52 12 25 04 48 25 13 12		01 46 01 46 01 46 01 46 01 46	31.00 34.00 35.00 37.00 38.00	300 27 00 299 45 36 299 21 36 298 51 00 298 33 00	40 25 12 41 04 48 41 27 00 41 45 00 41 58 12
01 4 01 4 01 4	13.00 15.00 45.15.00 45.16.00 45.17.00 45.18.00	313 51 36 313 39 36 313 36 00 313 27 00 313 17 24	25 22 48 25 35 24 25 41 24 25 46 48 26 13 12		01 46 01 46 01 46 01 46 01 46	39.00 40.00 41.00 42.00 43.00	298 18 00 297 58 46 297 41 24 297 24 36 297 07 48	42 10 48 42 23 24 42 36 36 42 51 00 43 04 12
01 4 01 4 01 4	45 19.00 45 21.00 45 22.00 45 23.00 45 24.00	313 12 00 312 58 48 312 49 12 312 41 24 312 35 24	26 24 00 26 45 36 26 57 00 27 06 36 27 10 48		01 46 01 46 01 46 01 46 01 46	46.00 47.00	296 49 46 296 28 12 296 13 12 295 53 24 295 20 24	43 15 36 43 29 24 43 42 36 43 56 24 44 17 24
01 4 01 4 01 4	45 25.00 45 26.00 45 27.00 45 28.00 45 29.00	312 27 36 312 18 00 312 11 24 312 03 36 312 00 36	27 21 36 27 34 12 27 46 48 27 57 00 28 09 36		01 46 01 46 01 46 01 46	51.00 52.00 53.00	295 04 12 294 41 24 294 20 24 294 01 48 293 39 36	44 34 48 44 51 00 45 04 12 45 17 24 45 27 00
01 4 01 4	45 30.00 45 31.00 45 32.00 45 34.00 45 36.00	311 55 48 311 43 48 311 37 48 311 17 24 311 02 24	28 20 24 28 31 12 28 41 24 29 03 36 29 22 48		01 46 01 46 01 46 01 46	56.00 57.00 58.00	293 18 00 293 04 12 292 36 00 292 15 36 291 56 24	45 39 36 45 47 24 46 04 48 46 19 12 46 33 00
01 01 01	45 37.00 45 38.00 45 39.00 45 40.00 45 42.00	310 56 24 310 46 12 310 35 24 310 28 12 310 10 12	29 34 12 29 45 36 29 54 00 30 07 12 30 30 36		01 43 01 43 01 43 01 43 01 43	7 01.00 7 02.00 7 04.00	291 31 12 291 08 24 290 49 48 290 06 36 289 15 00	46 45 36 46 56 24 47 07 48 47 34 12 48 03 00
01 01 01	45 43.00 45 44.00 45 45.00 45 46.00 45 48.00	310 00 00 309 51 00 309 42 00 309 31 48 309 15 36	30 42 00 30 51 00 30 58 12 31 12 36 31 35 24		01 4 01 4 01 4 01 4 01 4	7 08.00 7 09.00 7 10.00	288 52 12 288 27 36 288 01 12 287 40 48 287 15 00	46 16 12 48 26 24 48 39 00 48 49 48 49 00 00
01 01 01	45 49.00 45 50.00 45 51.00 45 52.00 45 54.00	309 03 36 308 54 36 308 52 48 308 33 36 308 13 48	31 48 00 32 02 24 32 14 24 32 26 24 32 43 48		01 4 01 4 01 4 01 4	7 13.00 7 14.00 7 15.00	286 51 36 286 26 24 285 59 24 285 37 12 284 13 48	
	45 56.00 45 57.00 45 58.00 45 59.00 46 00.00	307 52 12 307 43 12 307 32 24 307 19 48 307 06 36	33 10 12 33 24 36 33 36 00 33 46 12 33 57 00		01 4 01 4	7 19.00 7 20.00 7 21.00 7 23.00 7 24.00	283 48 36 283 22 12 262 54 00 281 58 48 281 31 12	50 53 24 51 03 00 51 24 00
01 01 01 01	46 01.00 46 02.00 46 05.00 46 07.00 46 08.00	306 55 48 306 48 00 306 14 24 305 49 48 305 39 00	34 09 00 34 21 00 34 58 48 35 26 24 35 34 48	•	01 4 01 4 01 4	7 25.00 7 26.00 7 27.00 7 28.00 7 29.00	281 00 36 280 30 00 280 01 12 279 31 48 278 58 12	52 00 36 52 13 12 52 23 24
01 01 01 01	46 10.00 46 11.00 46 12.00 46 13.00 46 14.00	305 13 12 304 57 36 304 48 00 304 38 24 304 24 36	36 00 00 36 14 24 36 27 36 36 40 48 36 54 36		01 4 01 4	30.00 31.00 7 32.00 7 33.00 7 34.00	278 29 24 277 57 36 277 25 12 276 55 12 276 24 00	52 54 00 2 53 03 36 2 53 14 24
01 01 01 01	46 15.00 46 16.00 46 17.00 46 18.00 46 19.00	304 14 24 303 58 12 303 46 48 303 39 00 303 18 00	37 18 36 37 29 24 37 40 12		01 01 01	35.00 47 36.00 47 37.00 47 38.00 47 39.00	275 55 12 275 21 36 274 46 12 274 12 00 273 39 36	53 46 12 53 56 24 54 04 48

				17 MAY 58				
HR MIN	SEC	AZIMUTH	ELEVATION		HR MIN	SEC SEC	AZIMUTH	ELEVATION
01 47 01 47 01 47 01 47 01 47	40.00 41.00 42.00 43.00 44.00	273 07 12 272 32 24 272 02 24 271 22 48 270 50 24	54 25 48 54 36 00 54 39 00 54 50 24 54 58 12		01 48 01 48 01 48 01 48 01 48	53.00 54.00 55.00 56.00 57.00	226 03 00 225 28 12 224 53 24 224 21 36 223 44 24	56 31 12 56 24 00 56 16 12 56 11 24 56 04 12
01 47 01 47 01 47 01 47 01 47		270 13 48 269 37 12 269 03 00 268 28 48 268 00 00	55 06 36 55 15 36 55 24 36 55 31 12 55 39 00		01 48 01 48 01 49 01 49 01 49		223 12 36 222 38 24 222 06 36 221 33 36 221 01 12	55 57 00 55 52 48 55 47 24 55 39 36 55 33 36
01 47 01 47 01 47 01 47 01 47	52+00 53+00 54+00	267 18 00 265 57 00 265 21 36 264 45 00 264 10 12	55 46 48 56 02 24 56 10 48 56 18 00 56 24 00		01 49 01 49 01 49 01 49 01 49	04.00 05.00 06.00	220 26 24 219 54 36 219 26 24 218 45 36 218 23 24	55 28 12 55 22 12 55 13 48 55 06 36 55 01 12
01 47 01 47 01 47 01 47 01 48	57.00 58.00 59.00	263 31 48 262 55 12 262 10 12 261 30 00 260 52 12	56 32 24 56 36 00 56 41 24 56 47 24 56 52 12		01 49 01 49 01 49 01 49 01 49	09.00 10.00 11.00	217 53 24 217 25 12 216 51 00 216 21 00 215 51 00	54 51 00 54 40 48 54 33 00 54 24 36 54 17 24
01 48 01 48 01 48 01 48	3 03.00 3 04.00 3 05.00	260 15 00 258 57 36 258 13 12 257 41 24 256 55 12	56 58 12 57 10 12 57 13 12 57 14 24 57 22 12		01 49 01 49 01 49 01 49	9 15.00 9 16.00 9 17.00	215 22 12 215 28 48 214 04 12 213 35 24 213 05 24	54 10 12 53 54 00 53 44 24 53 34 48 53 25 12
01 4: 01 4: 01 4: 01 4: 01 4	8 05.00 8 09.00 8 10.00	256 16 12 255 38 24 254 55 12 254 15 00 253 35 24	57 27 00 57 31 48 57 33 36 57 34 48 57 38 24		01 4 01 4 01 4 01 4 01 4	9 20.00 9 21.00 9 22.00	212 36 3 217 16 211 1	93 16 12 93 00 94 91 48 93 97 48
01 4 01 4 01 4 01 4	8 13.00 8 14.00 8 15.00	252 54 36 252 11 24 251 31 48 250 52 12 250 12 00	57 39 36 57 42 00 57 46 12 57 49 48 57 52 12		01 4 01	9 25.00 9 26.00 9 27.00 9 28.00 9 29.00	210 03 36 209 35 24 209 09 00 208 51 36 203 21 36	52 24 36 52 12 36 52 05 24 51 57 36 51 46 12
01 4 01 4	8 17.00 8 18.00 8 19.00 8 20.00 8 21.00	249 33 36 248 48 36 248 10 48 247 26 24 246 46 48	57 54 00 57 55 46 57 58 12 58 00 36 58 C1 48		01 4 01 4	9 30.00 9 31.00 9 32.00 9 34.00 9 35.00	208 01 12 207 37 12 207 11 24 206 23 24 206 01 12	51 37 48 51 27 36 51 22 12 51 03 00 50 54 00
01 01 01	48 22.00 48 24.00 48 25.00 48 26.00 48 27.00	246 04 12 244 41 24 244 03 36 243 20 24 242 42 36	57 58 48 57 59 24 57 58 48		01 01 01	49 36.00 49 37.00 49 39.00 49 40.00 49 41.00	205 44 24 205 20 24 204 30 36 204 11 24 203 52 12	50 42 00 50 31 12 50 12 00 50 03 00 49 52 48
01 01 01	48 28.00 48 29.00 48 30.00 48 31.00 48 32.00	241 55 48 241 17 24 240 33 36 239 55 48 239 16 48	57 57 36 57 56 24 3 57 50 24		01 01 01	49 42.00 49 43.00 49 44.00 49 45.00 49 46.00	203 35 24 203 11 24 202 52 48 202 33 36 202 11 24	49 34 48 49 27 00 49 15 00
01	48 33.00 48 34.00 48 35.00 48 36.00 48 37.00	238 04 12 237 24 30 236 39 00	2 57 47 24 6 57 44 24 0 57 41 24		01 01	49 47.00 49 48.00 49 49.00 49 50.00 49 51.00	201 51 36 201 32 24 201 13 12 200 56 24 200 37 48	48 46 12 48 34 48 48 27 00
01 01 01 01	48 38.00 48 39.00 48 40.00 48 41.00 48 42.00	234 42 3 234 03 0 233 25 4	6 57 32 24 0 57 29 24 8 57 27 00			49 52.00 49 53.00 49 55.00 49 56.00 49 57.00	199 27 00 199 07 4	47 59 24 47 36 00 47 27 00
01 01 01 01	48 43.00 48 44.00 48 45.00 48 46.00 48 47.00	231 36 3 230 54 0 230 18 0	6 57 15 36 0 57 11 24 0 57 07 12		01 01	49 59.00 50 00.00 50 01.00 50 02.00 50 04.00	197 58 1 197 43 4 197 28 4	2 46 47 24 8 46 38 24 8 46 27 00
01 01 01 01	48 48 00 48 49 00 48 50 00 48 51 00 48 52 00	228 25 4 0 227 54 0 0 227 21 3	8 56 54 00 00 56 49 12 36 56 44 24		01 01	50 05.00 50 06.00 50 07.00 50 08.00 50 09.00	196 24 0 196 02 2 195 49 4	0 45 48 36 4 45 38 24 8 45 28 48

					17 MAY 58				
HR	MIN	SEC	AZIMUTH	ELEVATION		HR	MIN SEC	AZIMUTH	ELEVATION
01 01 01 01	50 50	10.00 11.00 12.00 13.00 14.00	195 24 36 195 07 48 194 55 12 194 39 36 194 28 48	45 07 12 44 55 12 44 49 48 44 42 00 44 30 36		01 01 01 01	51 25.00 51 27.00 51 28.00 51 29.00 51 30.00	182 39 36 182 26 24 182 20 24 182 14 24 182 09 00	34 04 12 33 48 00 33 37 48 33 26 24 33 24 00
01 01 01 01	50 50 50 50 50	15.00 16.00 17.00 18.00 19.00	194 12 36 193 56 24 193 45 36 193 30 00 193 16 12	44 24 36 44 13 12 44 01 48 43 52 12 43 41 24		01 01 01 01 01	51 31.00 51 32.00 51 33.00 51 34.00 51 37.00	182 00 00 181 54 36 181 48 00 181 42 36 181 19 12	33 18 36 33 11 24 33 04 12 32 55 46 32 34 12
01 01 01 01	50 50 50 50	20.00 21.00 22.00 23.00 24.00	192 59 24 192 48 00 192 39 36 192 24 36 192 12 00	43 32 24 43 23 24 43 13 12 43 04 48 42 55 12		01 01 01 01	51 38.00 51 39.00 51 40.00 51 41.00 51 42.00	181 14 24 181 09 36 181 04 12 180 58 12 180 52 12	32 27 36 32 21 00 32 12 60 32 06 00 31 55 48
01 01 01 01	50 50 50 50	25.00 26.00 27.00 28.00 29.00	191 54 00 191 44 24 191 33 00 191 23 24 191 11 24	42 46 12 42 37 48 42 27 00 42 17 24 42 07 48		01 01 01 01	51 43.00 51 44.00 51 46.00 51 47.00 51 48.00	180 46 48 180 39 36 180 27 00 180 21 36 180 16 48	31 48 36 31 39 00 31 27 00 31 19 48 31 13 12
01 01 01 01 01	50 50 50 50	30.00 32.00 33.00 34.00 35.00	191 02 24 190 37 48 190 22 12 190 12 00 190 03 36	41 57 00 41 39 00 41 30 00 41 19 48 41 13 48		01 01 01 01 01	51 49.00 51 50.00 51 51.00 51 52.00 51 53.00	180 10 48 180 07 12 180 02 24 179 54 36 179 49 12	31 06 36 30 59 24 30 51 00 30 43 48 30 37 12
01 01 01 01	50 50 50 50 50	35.00 37.00 38.00 39.00 40.00	.189 50 24 189 38 24 189 29 24 189 15 00 189 04 48	41 03 00 40 53 24 40 44 24 40 36 00 40 25 12		01 01 01 01	51 54.00 51 55.00 51 56.00 51 57.00 51 58.00	179 45 36 179 39 36 179 31 48 179 26 24 179 22 48	30 30 36 30 24 00 30 18 00 30 09 36 30 03 36
01 01 01 01	50 50 50 50	41.00 42.00 45.00 46.00 47.00	188 54 36 188 44 24 188 15 36 188 07 12 187 55 12	40 16 12 40 06 36 39 39 00 39 31 48 39 24 00		01 01 01 01	51 59.00 52 00.00 52 02.00 52 03.00 52 04.00	179 18 00 179 12 36 179 03 00 178 57 00 178 51 00	29 57 00 29 48 36 29 33 00 29 27 00 29 21 36
01 01 01 01		48.00 49.00 50.00 51.00 52.00	187 46 12 187 35 24 187 25 48 187 15 36 187 00 36	39 14 24 39 05 24 38 55 48 38 48 00 38 39 00		01 01 01 01 01	52 06.00 52 07.00 52 08.00	178 46 12 178 42 00 178 38 24 178 34 12 178 28 48	29 15 36 29 09 00 29 01 48 28 56 24 28 48 00
01 01 01 01	50 50 50	54.00 55.00 56.00 57.00 58.00	186 45 00 186 37 12 186 28 12 186 2C 24 186 10 48	38 21 00 38 10 48 38 03 00 37 54 00 37 46 48		01 01 01 01	52 11.00 52 12.00 52 13.00	178 25 48 178 20 24 178 14 24 178 09 36 178 04 12	28 42 00 28 35 24 28 26 24 28 21 00 28 16 12
01 01 01	51 51 51	00.00 01.00 03.00	186 03 36 185 53 24 185 45 36 185 30 36 185 19 48	37 36 36 37 29 24 37 22 12 37 03 36 36 54 36		01 01 01 01	52 16.00 52 17.00 52 18.00	177 58 48 177 54 36 177 49 48 177 46 48 177 43 12	28 09 36 28 03 00 27 56 24 27 49 48 27 45 00
0	1 51 1 51 1 51	06.00 07.00 08.00	185 11 24 185 02 24 184 54 00 184 49 48 184 39 36	36 37 48 36 29 24 36 22 48		0; 0; 0;	1 52 21.00 1 52 22.00 1 52 23.00	177 38 24 177 34 12 177 29 24 177 23 24 177 18 36	27 31 12 27 23 24 27 16 12
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0		21.00		34 36 00 4 34 29 24 8 34 22 12		0	1 52 37.00 1 52 38.00 1 52 39.00 1 52 41.00 1 52 42.00	176 23 24 176 21 36 176 13 12	25 46 12 25 34 48 25 27 00

PATRICK AF8	THEOD. STA. 1.3	LAT . 28 16 17 N	LONG. 279 23 37 E	HT 0005 M

	HR	MIN	SEC	AZIMUTH	ELEVATION		HR	MIN	SEC	AZIMUTH	ELEVATION
	01	52	43 • 00	176 04 12	25 15 00		01	53	21.00	173 58 48	21 46 12
	01		44.00	176 00 36	25 10 12		01	53	22.00	173 55 48	21 42 00
	01		45.00	175 57 00	25 04 12		01	53	23.00	173 52 48	21 37 48
	01	52	46.00	175 53 24	25 00 00		01	53	24.00	173 51 00	21 32 24
	01		47.00	175 48 00	24 54 36		01	53	25.00	173 49 12	21 27 36
	01	32	47800				_				
	01	52	48.00	175 43 48	24 46 48		01	53	26.00	173 43 48	21 23 24
	01	52	49.00	175 41 24	24 40 48		01	53	27.00	173 41 24	21 19 12
•	01	52	50.00	175 37 48	24 35 24		01	53	28.00 .	173 39 00	21 14 24
	01	52	51,00	175 34 12	24 29 24 .		01	53	29.00	173 37 48	21 07 12
	01	52	52 • 00	175 33 36	24 25 12		01	53	30.00	173 33 00	21 00 00
,	01	52	54.00	175 26 24	24 09 36		01	53	31.00	173 30 36	20 54 00
	01	52	55.00	175 22 12	24 05 24		01	53	32.00	173 28 12	20 49 12
	01	52	56.00	175 17 24	23 59 24		01	53	33.00	173 25 12	20 44 24
	01	52	57.00	175 15 00	23 54 00		01	53	34.00	173 22 48	20 39 00
	01	52	58 • 00	175 11 24	23 48 36		01	53	35.00	173 22 48	20 32 24
	01	52	59.00	175 07 12	23 43 48		01	53	36.00	173 22 48	20 25 48
	01	53	00.00	175 04 12	23 37 48		01	53	37.00	173 22 48	20 19 48
	01	53	01.00	175 00 36	23 33 36		01	53	38.00	173 19 12	20 16 48
	01	53	02.00	174 57 36	23 29 24	•	01	53	40.00	173 07 48	20 08 24
	01	53	03.00	174 54 00	23 22 48		01	53	41.00	173 06 00	20 04 12
	01	53	04.00	174 50 24	23 18 00	•	01	53	42.00	173 04 48	20 00 00
	01	53	05.00	174 47 24	23 12 00		01	53	43.00	173 04 48	19 55 48
	01	53	06 • 00	174 43 12	23 06 00		01	53	44.00	173 04 48	19 50 24
	01	53	07.00	174 39 36	23 01 48		01		45.00	173 04 48	19 26 24
	01		08 • 00	174 35 24	22 55 12		01		46.00	173 04 12	19 35 24
	01	53	09.00	174 33 36	22 50 24		01	53	47.00	173 01 48	19 28 12
	01			174 30 36	22 44 24		01			172 55 12	19 18 36
				174 28 12	22 39 36		0 1			172 55 12	
	01			174 20 12	22 24 36		01			172 54 00	
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	01	53	15.00	1/4 1/ 24	22 10 25		J.	. 33	21.00	1/2 47 12	17 00 00
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01	44	32 • 00	31	5 2	28	48	17	06	0.0							01	45	00.00	312	44	24	21	01	48
01	44	33.00	31	5	22	12		34								01	45	01.00	312			2:		
01	44	34.00	31	5	10	12		34								01	45	02.00	312	41	24	21		
01	44	35.00	31	5	11	24	17	37	12							01	45	03.00	312	22	48	21	31	12
01	44	36.00	31	5	01	48	17	58	12							01	45	04.00	312			21	29	24
01	44	37.00				24		03								01	45	05.00	312			21	43	48
01	44	38 • 00				48		11								01	45	06.00	311				00	
01	44	39.00				00		3 10								01	45	07.00	311				0 %	
01	44	40 • 00	31	4	46	48	18	16	48							01	45	00.80	311	49	48	22	10	48
01	44	41.00				48			12							01	45	09.00	311				29	
01	44	42.00				36			12							01	45	10.00	311				15	
01	44	43.00				24			36							01	4.5	11.00	311				52	
01	44	44.00				12			00							01	45	12.00		37			35	
01	44	45.00	3	14	13	48	1	9 00	00							01	45	13.00	311	19	12	22	39	00
01	44	46.00				12			3 00							01				09			59	
01	44	47 • 00				24			24							01				57				00
01	44	48.00				0.0			00							01		16.00		53				36
01	44	49.00				12			5 48		•					01				54				12
01	44	50 • 00	3	13	43	12	1	9 3	7 12							01	45	18.00	310	47	24	23	39	00
01	44	51.00				00			2 00							01				33				48
01	44	52 • 00				24			5 12							01				31				36
01	44	53 • 00				00			4 12							01					12			48
01		54 . 00				3 2			7 48							01					00			36
01	44	55 • 00	3	13	24	• 0	0 2	0 2	1 00							01	45	23+00	309	55	48	24	30	00
01	44	56.00				2 1			4 00				•			0:					00			12
01	44	57 . 00	) 3	113	11	8 3	6 2	0 4	2 20							0:					48			24
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HR	MIN	SEC	AZIMUTH	ELEVATION	HR	MIN S	EC	AZIMUTH	ELEVATION
01 01 01 01 01	45 45	27.00 28.00 29.00 30.00 31.00	309 35 24 309 34 12 309 05 24 309 09 36 309 06 00	25 04 48 24 48 00 25 18 36 25 49 48 25 37 48		46 38 46 39 46 40	7.00 3.00 9.00 0.00 1.00	296 40 12 296 12 36 295 30 00 295 13 12 295 10 12	36 34 48 37 00 36 37 07 48 37 16 48 38 21 00
01 01 01 01 01	45 45 45 45	32.00 33.00 34.00 35.00 36.00	308 39 36 308 45 00 308 43 48 308 25 12 308 17 24	25 52 12 25 56 24 26 09 36 26 14 24 26 14 24	01 01 01 01	46 4 46 4	2.00 3.00 4.00 5.00 6.00	295 11 24 295 14 24 295 15 00 294 37 12 294 54 00	38 26 24 38 43 12 38 49 12 37 58 48 38 04 12
01 01 01 01 01	45 45 45 45	37.00 38.00 39.00 40.00 41.00	308 02 24 307 50 24 307 46 12 307 42 36 307 31 12	26 30 36 26 48 36 26 57 36 27 03 36 27 16 48		46 4 46 4 46 5		294 09 36 293 30 00 293 38 24 293 28 12 292 43 12	38 56 24 39 04 12 38 33 00 38 56 24 39 45 36
01 01 01 01		42.00 43.00 44.00 45.00 46.00	307 25 48 307 13 12 30- 03 36 306 52 48 306 51 00	27 31 12 27 34 48 27 51 00 28 06 36 28 07 12	01 01 01 01	46 9 46 9	2.00 3.00 54.00 55.00 66.00	292 08 24 292 28 48 292 54 00 291 42 36 290 58 12	39 34 48 39 16 48 39 48 36 40 36 36 40 29 24
01 01 01 01	45 45	48.00 49.00	306 45 36 306 25 12 306 24 00 306 15 36 305 55 48	28 07 12 28 24 00 28 19 48 28 30 36 28 46 12	01 01 01 01	46 46 47	57.00 58.00 59.00 00.00	291 30 36 291 29 24 290 33 00 290 24 00 290 00 00	40 04 12 40 37 48 40 48 00 40 45 00 41 18 36
01 01 01 01	45 45 45		305 45 36 305 44 24 305 20 24 305 10 12 305 06 36	28 52 48 29 12 36 29 11 24 29 22 48 29 43 12	01 01 01 01	47 47 47	02.00 03.00 04.00 05.00 06.00	289 42 36 289 30 36 289 28 48 288 51 00 288 27 00	41 27 36 41 36 36 41 51 00 42 03 00 42 10 12
01 01 01 01	45 45 46	58.00 59.00 00.00	305 03 36 304 38 24 304 33 36 304 17 24 304 11 24	29 48 36 29 58 48 30 10 12 30 25 12 30 42 00	01 01 01 01	47 47 47	07.00 08.00 09.00 10.00	288 12 00 287 46 12 287 42 36 287 10 12 287 06 36	42 20 24 42 34 12 42 46 12 42 39 00 42 51 00
0:	1 46 1 66 1 46	03.00 04.00 05.00	303 57 00 303 45 00 303 45 36 303 36 00 303 22 48	31 07 12 31 14 24 31 29 24	0 1 0 1 0 1	47 1 47 1 47	12.00 13.00 14.00 15.00 16.00	286 16 48 286 22 48 285 58 48 285 10 12 285 15 36	43 04 48 42 52 48 43 22 48 43 43 12 43 50 24
0	1 44 1 44 1 44 1 44	6 08•00 6 09•00 6 10•00	303 03 36 302 52 48 302 52 12 302 46 48 302 04 12	31 53 24 31 43 48 32 29 24	0:00	1 47 1 47 1 47	17.00 18.00 19.00 20.00 21.00	284 49 12 284 27 36 284 16 12 283 46 12 283 28 12	44 15 00 44 14 24 44 23 24
0	1 4 1 4 1 4 1 4	6 13.00 6 14.00 6 15.00	302 07 12 302 01 48 301 27 00 300 59 24 300 43 48	33 00 36 33 25 48 4 33 21 36	0 0 0 0	1 47 1 47 1 47	22.00 23.00 24.00 25.00 26.00	282 51 36 282 24 36 281 58 48 281 30 00 281 10 12	44 53 24 45 10 12 45 25 12
(	01 4	6 17.00 6 18.00 6 19.00 6 20.00 6 21.00	300 52 1 300 46 3 300 48 0 300 46 1 300 31 4	6 33 39 00 0 33 51 00 2 34 00 00	0		27.00 28.00 29.00 30.00 31.00	280 50 24 280 36 36 280 06 06 279 28 13 278 57 36	45 56 24 0 46 05 24 2 46 11 24
П	01 4 01 4	6 22.00 6 23.00 6 24.00 6 25.00 6 26.00	299 51 3 299 55 1 299 42 3 299 44 2 299 43 1	2 33 52 48 6 34 31 48 4 35 10 12	0	01 47 01 47 01 47 01 47 01 47	32.00 33.00 34.00 35.00 36.00	278 29 2 277 59 2 277 50 2 277 37 1 277 10 4	4 46 28 12 4 46 40 48 2 46 57 00
	01 01 01	27.00 46 28.00 46 29.00 46 30.00 46 31.00	298 49 4 298 32 2 297 46 1	8 34 46 12 4 35 06 36 2 35 24 00	(	01 47 01 47 01 47 01 47 01 47	38.00 39.00 40.00	276 47 2 275 57 3 276 17 2 276 01 4 274 42 3	6 47 18 36 4 47 04 12 8 47 40 12
	01 01 01	46 32.00 46 33.00 46 34.00 46 35.00 46 36.00	297 27 1 297 28 297 22	36 35 43 48 12 36 18 36 48 36 24 00		01 47 01 47 01 47 01 47 01 47	43.00 44.00 45.00	274 40 4 274 27 3 273 09 3	8 47 43 12 86 48 18 00 86 48 27 00

No.						17 MAY 56					
01 47 48-00	HR	MIN	SEC	A2IMUTH	ELEVATION		HR I	MIN :	SEC	AZIMUTH	ELEVATION
01 47 53-00 26 28 6 8 00 40 19 48	01 01 01	47 47 47	48.00 49.00 50.00	272 02 24 272 01 48 271 12 00	48 45 00 48 38 24 49 05 24		01 01 01	48 5 48 5 49 0	8.00 9.00 0.00	235 29 24 235 25 48 234 04 48	51 40 48 51 19 12 51 29 24
01 47 58+00 266 58 48 49 59 24 01 49 08+00 230 39 36 51 12 00 14 48 00+00 286 57 36 49 57 36	01 01 01	47 47 47	53.00 54.00 55.00	269 48 00 269 21 36 268 45 00	49 19 48 49 27 36 49 30 36		01 01 01	49 0 49 0 49 0	3.00 04.00 05.00	232 45 00 232 19 12 231 42 00	51 13 12 51 15 36 51 19 48
01 48 03-00 264 53 24 50 26 24 01 48 04-00 264 02 24 50 26 88 01 49 13-00 228 16 48 50 49 48 01 48 05-00 252 22 48 50 33 25 4 01 48 05-00 252 22 48 50 33 25 4 01 49 15-00 227 22 45 50 30 36 56 01 48 05-00 252 22 48 50 36 36 56 01 49 16-00 225 23 148 50 42 20 01 01 48 05-00 252 22 48 50 36 36 56 01 49 18-00 225 23 148 50 42 20 01 01 48 05-00 252 22 48 50 36 36 56 01 49 18-00 225 23 148 50 42 20 01 01 48 05-00 252 22 48 50 36 36 56 01 49 18-00 225 22 24 50 36 36 56 01 48 18-00 260 19 12 50 52 12 01 48 19-00 260 22 12 50 46 12 01 48 11-00 260 19 12 50 54 61 2 01 48 11-00 260 19 12 50 54 61 2 01 48 11-00 260 19 12 50 54 61 2 01 48 11-00 260 19 12 50 54 61 2 01 48 11-00 260 19 12 50 54 61 2 01 48 11-00 260 19 12 50 54 61 2 01 48 11-00 260 19 12 50 54 61 2 01 48 11-00 250 50 24 51 10 48 61 00 251 25 27 27 00 50 748 61 48 61 40 00 259 50 24 51 10 48 61 00 258 17 24 51 20 76 61 00 149 21-00 224 27 00 50 748 61 00 149 21-00 224 27 00 50 748 61 00 149 21-00 224 27 00 50 748 61 00 149 21-00 224 27 00 50 748 61 00 149 21-00 224 27 00 50 748 61 00 149 21-00 224 27 00 50 748 61 00 149 21-00 224 27 00 50 748 61 00 149 21-00 224 27 00 50 748 61 00 149 21-00 224 27 00 50 748 61 00 149 21-00 224 27 00 50 748 61 00 149 21-00 224 27 00 50 748 61 00 149 21-00 224 27 00 50 748 61 00 149 21-00 224 27 00 50 748 61 00 149 21-00 224 27 00 50 748 61 00 149 21-00 224 27 00 50 64 20 70 748 61 00 748 748 748 748 748 748 748 748 748 748	01 01 01	47 47 48	58.00 59.00 00.00	267 23 24 266 55 48 266 33 <b>3</b> 6	49 49 12 49 59 24 50 00 36		01 01 01	49 0 49 0	08.00 09.00 10.00	230 39 36 230 07 48 229 18 36	51 12 00 50 58 12 50 45 36
01 48 08.00 262 07 00 50 50 74 01 49 18.00 225 46 48 50 18 36 10 48 09.00 260 221 10 12 50 52 12 01 49 18.00 225 22 45 50 21 00 01 48 11.00 260 221 25 50 46 12 01 49 20.00 224 47 24 50 07 48 11.00 260 19 12 50 56 00 01 49 21.00 224 27 70 50 07 48 01 48 11.00 260 19 12 50 56 00 01 49 21.00 224 27 70 50 07 48 01 48 11.00 250 93 99 00 51 03 48 01 49 22.00 223 51 36 50 05 24 01 48 11.00 250 95 24 51 10 48 01 49 22.00 223 51 36 50 05 24 01 48 11.00 250 95 24 51 10 48 01 49 24.00 223 52 62 44 50 01 12 01 49 11.00 250 95 24 51 10 48 01 49 24.00 223 57 36 50 01 12 01 48 11.00 250 73 71 12 51 31 12 01 40 01 49 26.00 222 73 36 49 35 24 10 48 11.00 250 73 71 12 51 34 12 01 49 26.00 222 73 36 49 35 24 10 48 11.00 250 42 00 51 39 70 01 48 11.00 250 42 01 48 11.00 250 42 51 46 48 01 49 28.00 222 03 74 48 48 57 00 01 48 21.00 256 42 00 51 39 70 01 48 21.00 256 42 00 51 39 70 01 48 21.00 256 42 00 51 39 70 01 48 21.00 256 42 00 51 39 70 01 48 21.00 256 42 00 51 39 70 01 48 21.00 256 05 24 51 46 48 01 49 30.00 220 47 24 48 57 00 01 48 21.00 256 05 24 51 46 48 01 49 30.00 220 37 48 48 48 60 01 49 30.00 20 20 77 24 48 57 00 01 48 21.00 256 05 24 51 46 48 01 49 30.00 20 20 77 24 48 48 60 01 49 30.00 20 20 77 24 48 48 60 01 49 30.00 20 20 77 24 48 48 60 01 48 21.00 256 39 36 51 47 24 51 45 30 48 60 11 49 30.00 20 20 77 24 48 48 60 01 48 21.00 256 39 36 51 47 24 51 45 30 48 60 11 49 30.00 20 20 77 24 48 48 60 01 48 21.00 256 39 39 39 31 45 70 01 48 21.00 250 37 48 48 48 60 01 49 30.00 20 21 22 24 48 48 60 01 49 30.00 20 21 22 24 48 48 60 01 48 21.00 250 37 38 51 47 24 01 48 21.00 250 37 48 48 48 60 01 49 30.00 21 21 24 36 48 60 01 49 30.00 21 21 24 36 48 60 01 49 30.00 21 21 24 36 48 60 01 49 30.00 21 21 24 36 48 60 01 49 30.00 21 21 24 36 48 60 01 49 30.00 21 21 24 36 48 60 01 49 30.00 21 21 24 36 48 60 01 49 30.00 21 21 21 35 48 60 01 48 21.00 250 41 24 52 50 12 50 01 40 41 41 41 41 41 41 41 41 41 41 41 41 41	01 01 01	48 48 48	03.00 04.00 05.00	264 53 24 264 20 24 263 56 24	50 26 24 50 28 48 50 32 24		01 01 01	49 49 49	13.00 14.00 15.00	228 16 48 227 51 36 227 22 46	50 49 48 50 39 00 50 43 48
01 48 13-00. 259 39 00 51 09 36	01 01 01	48 48 48	08.00 09.00 10.00	262 09 00 261 10 12 260 22 12	50 50 24 50 52 12 50 46 12		01 01 01	49 49 49	18.00 19.00 20.00	225 46 48 225 29 24 224 47 24	50 18 36 50 21 00 50 07 48
01 48 19:00 255 19:12 51 28 48	01 01 01	48 48 48	13.00. 14.00 15.00	259 39 00 259 05 24 258 55 12	51 09 36 51 10 48 51 11 24		01 01 01	49 49 49	23.00 24.00 25.00	223 26 24 222 57 36 222 37 48	50 01 12 50 00 00 49 54 36
01 48 22.00 253 49 48 51 48 36 01 48 25.00 253 49 48 51 48 36 01 48 25.00 253 49 48 51 48 36 01 48 25.00 253 49 48 51 48 36 01 48 25.00 253 12 00 51 45 00 01 49 35.00 217 57 00 48 45 36 01 48 26.00 252 43 48 51 53 74 01 49 37.00 217 57 00 48 45 00 01 48 27.00 251 53 33 65 51 57 36 01 48 27.00 251 33 36 51 57 36 01 48 30.00 250 49 12 52 03 36 01 48 30.00 250 49 12 52 03 36 01 48 30.00 250 49 12 52 03 36 01 48 30.00 250 49 12 52 03 36 01 48 33.00 248 45 36 51 40 48 01 48 33.00 248 45 36 51 40 48 01 48 33.00 247 22 48 52 02 24 01 48 35.00 247 22 48 52 02 24 01 48 35.00 247 22 48 52 02 24 01 48 35.00 247 22 48 52 02 24 01 48 36.00 247 24 48 52 52 00 36 01 48 36.00 247 24 48 52 52 00 36 01 48 36.00 247 24 48 52 02 24 01 48 36.00 247 24 48 52 02 24 01 48 36.00 247 24 48 52 02 24 01 48 36.00 247 24 48 52 02 24 01 48 36.00 247 24 48 52 02 24 01 48 36.00 247 24 48 52 02 24 01 48 36.00 247 24 48 52 02 24 01 48 36.00 247 24 48 52 02 24 01 48 36.00 247 24 48 52 00 36 01 48 36.00 247 24 48 52 52 00 36 01 48 36.00 247 24 36 52 00 36 01 48 36.00 247 24 24 52 50 12 01 48 48.00 248 27 36 51 55 12 01 49 49.00 212 28 48 47 40 12 01 48 36.00 247 24 28 52 05 24 01 48 37.00 247 27 24 65 52 00 36 01 48 48.00 248 27 36 51 55 12 01 48 48.00 248 27 36 51 55 12 01 48 48.00 248 27 36 51 55 12 01 48 48.00 248 27 36 51 55 12 01 48 48.00 248 27 36 51 55 12 01 48 48.00 249 30 35 52 09 00 01 48 48.00 249 30 35 52 09 00 01 48 48.00 240 28 12 52 11 24 01 48 48.00 240 28 12 52 11 24 01 48 48.00 240 28 12 52 11 24 01 48 48.00 240 28 12 52 11 24 01 48 48.00 240 28 12 52 11 24 01 48 48.00 240 28 12 52 12 00 01 49 55.00 213 36 36 46 18 36 01 48 48.00 240 28 12 52 12 00 01 49 55.00 213 36 36 45 48 51 51 51 20 01 48 55.00 28 38 28 48 51 54 36 01 48 55.00 28 38 28 48 51 54 36 01 48 55.00 28 38 28 48 51 54 36 01 48 55.00 28 38 28 48 51 54 36 01 48 55.00 28 38 28 48 51 54 36 01 48 55.00 28 38 28 48 51 54 36 01 48 55.00 28 38 28 48 51 54 36 01 48 55.00 28 38 28 48 51 54 36 01 48 55.00 28 38 28 48 51 54 36 01 48 55.00 28 38 48 45 51 54 36 01 48 55.00 28 38	01 01 01	48 48 48	18.00 19.00 20.00	257 19 12 256 42 00 256 35 24	51 28 46 51 39 00 51 46 48		01 01 01	49 49 49	28.00 29.00 30.00	221 22 12 220 46 48 220 47 24	49 35 24 49 10 12 48 57 00
01 48 28.00 251 33 36 51 57 36	01 01	48 48	23.00 24.00 25.00	254 39 36 253 49 48 253 12 00	51 47 24 51 48 36 51 45 00		01 01 01	49 49 49	33.00 34.00 35.00	219 28 48 219 03 00 219 28 48	48 49 12 48 54 36 48 48 36
01 48 33.00	0	l 48 l 48 l 48	28.00 29.00 30.00	251 33 36 251 33 36 250 49 12	51 57 36 51 52 48 52 03 36		01 01 01	49 49	38.00 39.00 40.00	217 24 36 217 24 36 217 21 36	48 34 48 47 47 24 48 30 36
01 48 38.00	0	1 41 1 41 1 4	33.00 34.00 8 35.00	248 45 36 248 21 36 247 22 48	51 40 48 51 33 00 52 02 24		01 01 01	49 49	43.00 44.00 45.00	215 31 12 215 10 12 214 48 36	48 06 00 47 57 36 47 49 12
01 48 43.00	0	1 4 1 4 1 4	8 38.00 8 39.00 8 40.00	246 11 24 245 42 36 245 09 36	51 58 12 5 51 55 12 5 <b>51</b> 52 12		01 01 01	49 49 49	48.00 49.00 50.00	213 58 12 213 28 12 212 57 36	47 16 48 47 10 48 47 06 36
01 48 48.00 240 28 12 52 13 48 01 49 58.00 210 34 48 45 42 36 01 48 49.00 240 22 12 52 14 24 01 49 59.00 209 55 48 45 47 24 01 48 50.00 239 36 36 52 12 00 01 50 00.00 209 43 48 45 10 12 01 48 51.00 239 10 12 52 05 24 01 50 01.00 209 40 12 45 33 36 01 48 53.00 238 28 48 51 54 36 01 50 02.00 209 40 12 45 33 36 01 48 53.00 238 12 00 51 58 48 01 50 03.00 208 51 36 45 23 24 01 48 55.00 236 52 48 51 55 12 01 50 03.00 208 14 24 45 30 36 01 48 55.00 236 52 48 51 55 12 01 50 05.00 208 18 36 45 16 48	0	01 4	8 43.00 8 44.00 8 45.00	243 03 5 242 12 0 242 09 3	5 52 09 00 0 52 12 00 6 52 12 00		0:	1 49 1 49 1 49	53.00 54.00 55.00	211 52 12 211 36 36 211 36 36	2 46 39 36 6 46 33 00 6 46 18 36
01 48 53*09 238 12 00 51 58 48 01 50 03*00 208 51 36 45 23 24 01 48 54*00 237 30 00 52 03 00 01 50 04*00 208 14 24 45 30 36 01 48 55*00 236 52 48 51 55 12 01 50 05*00 208 18 36 45 16 48	(	01 4	8 48.00 8 49.00 8 50.00	240 28 1 240 22 1 239 36 3	2 52 13 48 2 52 14 24 6 52 12 00		0 0 0	1 49 1 49 1 50	58.00 59.00 00.00	210 34 4 209 55 4 209 43 4	8 45 42 36 8 45 47 24 8 45 10 12
		01 01 01	48 53 • 09 48 54 • 00 48 55 • 00	238 12 0 237 30 0 236 52 4	51 58 48 50 52 03 00 6 51 55 12		0	1 50 1 50 1 50	03.00 04.00 05.00	208 51 3 208 14 2 208 18 3	6 45 23 24 4 45 30 36 6 45 16 48

		17 MAY 58		
HR MIN SEC	AZIMUTH ELEVATION		HR MIN SEC	AZIMUTH ELEVATION
01 50 07.00 01 50 08.00 01 50 09.00 01 50 10.00 01 50 11.00	207 02 24 44 39 00 206 55 12 44 23 24		01 51 17.00 01 51 18.00 01 51 19.00 01 51 20.00 01 51 21.00	192 01 48 35 56 24 191 49 12 35 37 48 191 36 36 36 36 36 191 33 00 35 24 00 191 34 48 35 18 00
01 50 12.00 01 50 13.00 01 50 14.00 01 50 15.00 01 50 16.00	205 43 12 44 07 12 205 36 00 43 59 24 205 28 12 43 51 36		01 51 22.00 01 51 23.00 01 51 24.00 01 51 25.00 01 51 26.00	191 33 36 35 02 24 191 33 36 35 14 24 191 29 24 34 58 12 190 46 48 34 53 24 190 52 48 34 54 00
01 50 17.00 01 50 18.00 01 50 19.00 01 50 20.00 01 50 21.00	204 25 12 43 26 24 203 49 12 43 11 24 203 42 00 43 16 12		01 51 27.00 01 51 28.00 01 51 29.00 01 51 30.90 01 51 31.00	190 49 48 34 31 48 190 31 48 34 21 36 190 18 00 34 15 36
01 50 22.00 01 50 23.00 01 50 24.00 01 50 25.00 01 50 26.00	0 202 54 36 42 42 36 0 202 46 12 42 36 00 0 202 43 48 42 33 36		01 51 32.00 01 51 33.00 01 51 34.0 01 51 35.0 01 51 36.0	189 54 00 33 49 48 189 52 48 33 43 12 189 45 00 33 35 24
01 50 27*01 01 50 28*01 01 50 29*01 01 50 30*0 01 50 31*0	0 201 58 12 42 06 00 0 201 43 48 42 01 48 0 201 31 48 41 48 36		01 51 37.0 01 51 38.0 01 51 39.0 01 51 40.0 01 51 41.0	0 189 11 24 33 C1 48 0 189 09 36 33 04 48 C 189 06 36 32 58 48
01 50 32.0 01 50 33.0 01 50 34.0 01 50 35.0 01 50 36.0	0 200 34 12 41 42 36 0 200 26 24 41 23 24 0 200 21 00 41 04 12		01 51 42.0 01 51 43.0 01 51 44.0 01 51 45.0 01 51 46.0	0 188 34 48 32 47 24 0 188 18 35 32 29 24 0 188 15 00 32 29 24
01 50 37•n 01 50 38•0 01 50 39•0 01 50 40•0 01 50 41•0	00 199 31 12 40 39 00 00 199 26 24 40 28 12 00 199 01 12 40 37 12		01 51 47. 01 51 48. 01 51 49. 01 51 50. 01 51 51.	00 187 55 48 32 17 24 00 187 43 48 31 51 00 00 187 34 48 31 43 12
01 50 42.0 01 50 43.0 01 50 44.0 01 50 45.0 01 50 46.0	00 198 13 12 40 09 00 00 198 03 00 40 01 12 00 197 54 00 39 51 00		01 51 52. 01 51 53. 01 51 54. 01 51 55. 01 51 56.	00 187 11 24 31 27 00 00 186 56 48 31 22 48 00 186 55 49 31 06 00
01 50 47 e	00 197 15 00 39 23 24 00 197 15 36 39 16 48 00 196 51 00 39 05 36	-	01 51 57 01 51 58 01 51 59 01 52 00 01 52 01	00 186 53 24 31 03 36 00 186 40 48 30 46 48 00 186 24 36 30 31 12
01 50 52. 01 50 53. 01 50 54. 01 50 55. 01 50 56.	00 196 20 24 39 03 00 00 196 21 00 38 37 48 00 196 11 24 38 36 00		01 52 020 01 52 030 01 52 040 01 52 050 01 52 06	00 186 18 00 30 41 24 00 186 15 00 29 56 24 00 186 12 36 30 00 00
01 50 57 01 50 58 01 50 59 01 51 00 01 51 01	000 195 38 24 38 04 12 000 195 25 48 38 10 12 000 195 08 24 38 03 00		01 52 07 01 52 08 01 52 09 01 52 10 01 52 11	00 185 21 00 29 51 36 00 185 22 48 29 43 12 00 185 18 00 29 18 36
01 51 034 01 51 044 01 51 054	•00     194     52     12     37     46     48       •00     194     39     00     37     32     24       •00     194     26     24     37     79     12       •00     194     11     24     37     22     48       •00     193     58     48     37     18     00		01 52 13 01 52 14 01 52 15	**00     185     06     00     29     48     00       **00     185     04     12     29     36     36       **00     184     53     24     29     31     12       **00     184     45     00     29     27     36       **00     184     45     36     29     16     12
01 51 08 01 51 09 01 <b>5</b> 1 10	•00     193     46     12     37     09     36       •00     193     33     00     37     04     12       •00     193     19     12     36     57     06       •00     193     16     48     36     45     00       •00     193     12     00     36     21     36	! 	01 52 18 01 52 19 01 52 20	.00 184 43 48 29 22 48 .00 184 22 48 29 07 48 .00 184 22 48 28 42 00 .00 184 13 12 28 54 00 .00 184 06 00 28 52 48
01 51 13 01 51 14 01 51 15	1.00     192     52     12     36     22     48       1.00     192     37     48     36     34     12       1.00     192     16     12     36     21     36       1.00     192     12     36     36     07     12       1.00     192     09     36     36     06     36	2	. 01 52 23 01 52 24 01 52 29	.00 184 05 24 29 37 12 .00 184 01 48 28 31 48 .00 183 57 00 28 24 36 .00 183 45 36 28 02 24

PATRICK AF8	RADAR	STA. XN-2	LAT. 26 36 55 N	LONG. 281 39 06 E	HT 0014 M

HR	MIN	SEC	AZ IMUTH	ELEVATION	HR	MIN	SEC	AZIMUTH	ELEVATION
01	52	27.00	183 43 48	28 09 00	01	52	57.00	181 04 48	25 04 48
01	52	28.00	183 29 24	27 45 00	01	52	58.00	181 03 00	25 09 00
01	52	29.00	183 20 24	27 34 48	01	52	59.00	181 00 36	25 07 12
01	52	30.00	183 17 24	27 42 00	01	53	00.00	180 56 24	24 57 00
01	52	31.00	183 10 48	27 39 00	01	53	01.00	180 52 48	24 49 12
01	32	31.00	103 10 45	21 37 00	01	,,	01.00	1110 32 40	24 47 21
01	52	32.00	183 00 36	27 36 00	01	53	02.00	180 45 36	24 36 36
01	52	33.00	182 58 48	27 34 12	01	53	03.00	180 40 12	24 24 36
01	52	34.00	182 51 36	27 16 12	01	53	04.00	180 40 48	24 27 36
01	52	35.00	182 46 12	27 10 48	01	53	05.00	180 34 12	24 43 48
01	52	36.00	182 42 36	27 07 12	01	53	06.00	180 20 24	24 27 00
0.1		3000	102 42 30	2. 0. 12	•			100 10 2	24 21 00
01	52	37.00	182.37 48	. 27 01 12	01	53	07.00	180 17 24	24 19 12
01	52	38.00	182 34 48	26 52 48	01	53	08.00	180 13 48	24 15 00
01	52	39.00 .	182 23 24	26 42 36	01	53	09.00	180 13 12	24 07 12
01	52	40.00	182 18 36	26 39 36	01	53	10.00	180 12 36	24 00 00
01	52	41.00	182 17 24	26 39 00	01	53	11.00	180 12 00	23 48 36
01		-1.00	102 11 24	20 37 00	01		1100	100 12 00	23 40 30
01	52	42.00	182 17 24	26 37 48	01	53	12.00	180 11 24	23 43 48
01	52	43.00	182 16 12	<sup>7</sup> 6 16 4€	01	53	13.00	180 07 12	23 40 12
01	52	44.00	182 15 00	26 16 12	01	53	14.00	179 57 00	23 32 24
01	52	45.00	181 57 00	26 12 00	01		15.00	179 51 00	23 30 00
01	52	46.00	181 52 48	26 13 12	Ŏ1		16.00	179 48 36	23 21 00
01	,,	40.00	101 32 40	20 1) 12	•1	,,	10.00	117 45 50	23 21 00
01	52	47.00	181 50 24	26 09 00	01	53	17.00	179 45 00	23 18 36
01	52	48.00	181 42 36	25 53 24	01	53	18.00	179 41 24	23 15 36
01	52	49.00	181 34 12	25 48 36	01		19.00	179 28 12	22 32 24
01	52	50.00	181 32 24	25 43 48	01		20.00	179 27 36	22 50 24
01	52	51.00	181 30 36	25 37 12	Ŏ1		21.00	179 25 46	22 43 48
01	26	31.00	101 .70 30	23 3. 12	0.1	,,,	21000	1.7 25 40	22 43 40
01	52	52.00	181 26 24	25 36 36	01	53	22.00	179 25 12	20 57 00
01		53.00	181 24 00	25 31 12	01			179 25 12	22 10 48
őî			181 19 12		01			179 23 24	22 05 24
01			181 13 12		0 3			179 23 24	21 45 36
01			181 08 24	25 04 48	01			179 22 48	22 50 24
01	, ,	20 00	101 00 24	22 04 40	0,	. ,,	2000	1., 22 40	

PATRICK AF8 OPT.TR STA. 7.2 LAT. 21 26 00 N LONG. 286 51 17 E HT 0025 M 18 MAY 58 AZIMUTH ELEVATION HR MIN SEC AZIMUTH ELEVATION HR MIN SEC 150 24 00 149 13 12 32 23.00 00 31 50.00 24.00 25.00 26.00 150 30 00 150 55 12 151 19 48 41 00 36 41 00 00 40 47 24 51.00 149 26 24 149 19 12 46 30 00 00 00 31 52.00 46 12 00 45 49 12 00 32 ۵n 53.00 45 49 12 00 40 47 24 31 45 39 36 00 32 28.00 152 04 48 55.00 00 56.00 57.00 58.00 149 25 12 149 31 12 149 58 12 45 30 36 44 57 00 45 54 00 00 32 32 32 29.00 30.00 31.00 152 15 36 152 28 48 152 21 00 40 07 12 39 34 48 39 40 12 00 31 00 31 31 00 152 21 00 39 35 24 39 19 12 38 52 12 38 52 12 37 39 36 149 44 24 152 21 00 00 00.00 149 42 36 149 42 36 44 49 12 44 49 12 00 32 32 01.00 00 32 32 34.00 35.00 152 21 00 152 19 48 00 149 42 36 44 24 36 152 22 12 149 45 36 37.00 00 32 04.00 44 43 12 152 24 00 152 19 12 152 21 36 152 21 36 149 50 24 149 54 36 149 54 36 32 05.00 00 32 37 28 12 00 00 36 03 36 35 14 24 34 57 36 00 32 32 06.00 07.00 44 03 00 43 46 12 32 32 39.00 40.00 149 58 12 43 32 24 00 41.00 00 00 32 10.00 43 21 00 00 32 42.00 152 21 00 152 19 48 152 03 00 151 54 00 152 00 00 150 04 12 43 17 24 00 32 00 11.00 35 24 00 35 05 24 32 32 12.00 13.00 150 04 12 150 06 36 42 57 00 42 39 36 00 32 32 44.00 00 00 00 14.00 150 01 48 00 00 150 03 36 152 21 00 152 12 00 151 56 24 152 54 36 00 32 150 09 00 00 32 48.00 16.00 33 31 32 32 32 17.00 18.00 150 10 12 150 09 00 150 21 36 42 05 24 41 56 24 41 28 48 00 32 49.00 50.00 00 0.0 32 32 34 58 12 32 27 36 19.00 00 00 150 29 24 41 06 36 00 32 32 21.00 53.00 152 36 36 153 24 36 00 34 28 12 22.00 150 24 00 40 58 12

9.0	MAY	

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HR	MIN	SEC	AZIMUTH	ELEVATION		HR	MIN	SEC	AZIMUTH	ELEVATION
00	32	55.00	154 36 36	34 28 12		. 00	33 4	8.00	154 28 48	25 45 36
00	32	56.00	154 30 00	34 38 24		00		9.00	150 00 00	25 09 36
00	32	57.00	152 03 00	32 43 48		00		0.00	148 24 00	25 13 12
00	32	58.00	151 51 00	32 03 36		00		1.00	148 14 24	27 43 12
00	32	59.00	151 40 48	32 15 00		00		52.00	149 13 48	29 54 00
00	33	00.00	151 07 12	31 48 36		00	33 5	53.00	151 27 36	27 55 12
00	33	01.00	151 36 00	30 50 24		00		54.00	152 49 12	25 37 12
00	33	02.00	151 27 00	30 19 48		00		55.00	154 52 48	25 04 48
00	33	03.00	151 22 12	29 34 48		00		56.00	156 12 00	24 04 12
00	33	04•00	151 24 00	29 34 48		00	33	57.00	157 09 36	24 14 24
00	33	05.00	151 19 48	29 21 36		00		58.00	157 02 24	28 38 24
00	33	06 • 0 0	151 19 12	29 17 24		00		59.00	156 37 48	30 06 00
20	33	07.00	151 19 12	29 17 24				00.00	156 07 43	36 39 00
00	33 33	08.00	151 19 12 151 13 48	29 16 12 28 49 48		00 0 <b>0</b>		01.00	157 44 24	27 31 48
00		09•00 .						02.00	158 2 <b>7 36</b>	28 18 36
00	33	10.00	151 09 00	29 04 48		00		03.00	158 39 00	28 20 24
00	33	11.00	151 04 48	29 06 00		00		04.00	158 39 36	28 20 24
00	33	12.00	151 04 48	29 06 00		00		05.00	158 39 00	28 15 12
00	33	13.00	151 19 12 151 16 48	29 01 12		00	34	06.00	158 40 48	28 22 48
00	33	14.00		28 57 36		00	34	07.00	158 40 48	28 25 12
00	33	15.00	151 17 24	29 13 48		00	34	00.80	158 40 48	28 23 24
00	33	16.00	151 33 36	29 19 12		00	34	09.00	155 40 48	28 17 24
00	33	17.00	151 18 30	29 11 24		00	34	10.00	158 34 48	28 00 00
00	33	18.00	151 27 36	29 08 24		00		11.00	158 25 48	28 03 36
00	33	19.00	151 22 12	28 56 24		00	34	12.00	158 43 36	26 16 12
00	33	20.00	151 19 46	29 16 12		00		13.00	157 37 12	24 44 24
00	33	21.00	151 28 12	29 19 12		0.0		14.00	156 27 00	27 12 <b>0</b> 0
00	33	22.00	151 22 48	29 15 00		00		15.00	156 44 24	29 05 24
00	33	23.00	151 18 00	29 04 12		00		16.00	157 19 12	28 43 48
oc	33	24.00	151 18 00	29 11 24		00	34	17.00	156 51 00	23 48 00
00		25.00	151 18 00	29 04 12		00		18.00	156 42 00	23 10 12
00		26.00	151 18 00	29 08 24		00		19.00	156 04 12	21 58 12
00			151 21 00	29 09 36		00		20.00	153 36 <b>0</b> 0	22 26 24
00			151 17 24	29 02 24		00		21.00	154 00 00	22 51 36
00	33	29.00	151 18 00	29 05 24		00	34	22.00	156 51 00	22 25 12
00	33	30.00	151 18 36	29 06 00		CO	34	23.00	157 43 48	22 00 36
00			151 31 12	29 09 00		00		24.00	157 52 12	
00			151 21 00	29 08 24		00		25.00	159 22 48	
00			151 13 12	28 52 48		C:		26.00	158 22 48	
00	33	34+00	151 15 36	29 14 24		00	34	27.00	159 18 00	22 39 00
00			151 22 48	29 22 12		0.0	-	28.00	161 30 00	
00			151 24 36	29 15 00	•	0.0	-	29.00	164 30 00	
00			152 03 00	27 32 24		00		30.00	168 21 36	
00			152 16 12 151 13 12	26 56 24 27 17 24		00		31.00	168 45 36 170 18 36	
00	33	39÷00					_	32.00		
0			151 21 00			0		33.00	168 21 00	
0			152 22 12			0			167 27 36	
0			152 51 36			0			167 21 00	
0			152 47 24 152 15 48			0			166 39 00 166 11 20	
		•					-	_		
0			152 13 46			0			165 51 30	
0			152 12 36			0	0 34	39.00	162 41 2	4 24 39 36
0	0 3	3 47+00	154 09 00	27 06 00						

PATRICK AFB	THEOD. STA. 1.20	LAT• 28 31 29 N	LONG. 279 26 21 E	HT 0011 M

				7.7							
HR	MIN	SEC	AZ IMUTH	ELEVATION	HR	MIN	SEC	AZIMUTH	ŧ	ELEVAT	ION
00	39	17.00	009 05 24	33 10 12	00	39	26.00	011 17 2	24	34 49	12
00	39	18.00	009 24 36	33 22 48	00	39	27.00	011 34 4	8	35 01	48 .
00	39	19.00	009 42 00	33 30 36	00	39	28.00	011 48 1	36	35 14	24
00	39	20.00	009 47 24	33 39 00	00	39	29.00	012 05 2	24	35 25	12
00	39	21.00	010 02 24	33 47 24	90	39	30.00	012 21	00	35 35	24
00	39	22.00	010 17 24	33 58 12	00	39	31.00	012 37	48	35 49	12
00	39	23 6 0 0	010 34 48	34 15 36	ōo	39	32.00	012 54		35 59	
00	39	24.00	010 45 00	34 28 12	00		33.00	013 11		36 11	
00	39	25.00	011 03 36	34 36 00	00		34.00	013 28		36 24	ōο

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HR I	MIN	SEC	AZ IMUTH	ELEVATION				HR	MIN	SEC	AZIMUTH	ELEVAT ION
00 00 00	39 39 39	35.00 36.00 37.00 38.00 39.00	013 43 48 014 03 00 014 19 12 014 38 24 014 49 12	36 37 12 36 52 48 37 02 24 37 11 24 37 23 24				00 00	40 4 40 4	45.00 46.00 47.00 48.00 49.00	041 53 24 042 25 12 042 58 48 043 31 12 044 03 00	48 43 12 48 49 12 48 55 48 49 03 36 49 11 24
00 00 00	39 39 39 39	40.00 41.00 42.00 43.00 44.00	015 08 24 015 29 24 015 45 36 016 03 00 016 24 36	37 36 36 37 49 12 37 57 36 38 04 48 38 18 36	•			00 00 00 00	40 40 40	50.00 51.00 52.00 53.00 54.00	044 33 36 045 07 12 045 39 36 046 13 12 046 46 12	49 18 36 49 25 12 49 31 12 49 37 12 49 43 12
00 00 00 <b>0</b> 0	39 39 39 39	45.00 46.00 47.00 48.00 49.00	016 43 12 017 03 00 017 22 12 017 41 24 017 58 48	38 31 12 38 45 00 38 58 48 39 07 12 39 18 00				00 00 00 00	40 40 40	55.00 56.00 57.00 58.00 59.00	047 20 24 0~7 53 24 046 28 12 049 00 00 049 35 24	49 48 36 49 52 48 49 59 24 50 36 36 50 12 36
00 00 00 00	39 39 39 39	50.00 51.00 52.00 53.00 54.00	018 20 24 018 40 12 018 59 24 019 19 48 019 39 36	39 31 12 39 44 24 39 54 00 40 04 48 40 16 12				00 00 00 00	41	00.00 01.00 02.00 03.00 04.00	050 10 12 050 42 36 051 16 48 051 51 36 052 25 48	50 16 12 50 21 36 50 25 12 50 28 48 50 32 24
00 00 00 00 <b>0</b> 0	39 39 39 39	55.00 56.00 57.00 58.00 59.00	020 02 24 020 22 48 020 41 24 021 02 24 021 25 48	40 27 00 40 39 36 40 52 48 41 03 36 41 15 00				00 00 00 00	41 41 41 41	05.00 06.00 07.00 08.00	053 00 00 053 36 36 054 11 24 054 45 36 055 13 12	50 36 36 50 40 12 50 42 36 50 45 00 50 49 12
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PATRICK AFB THEOD. STA. 1.20	LAT. 28 31 29 N L	ONG. 279 26 21 E	HT 0011 M
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00 46 41*00 134 46 48 18 13 12 00 46 42*00 134 50 24 18 09 36 00 46 43*00 134 52 48 18 03 36		00 47 26.00 00 47 27.00 00 47 28.00	136 53 24 15 01 48 136 57 36 14 55 12 137 00 00 14 52 48
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00 46 55.00 135 30 00 17 12 00 00 46 56.00 135 33 00 17 07 12		00 47 40.00 00 47 41.00	137 30 00 14 07 12 137 31 12 14 02 24
00 46 57.00 135 35 24 17 01 48 00 46 58.00 135 39 00 16 58 12		00 47 42.00 00 47 43.00	137 34 12 14 00 00 137 36 00 13 55 12
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00	45 45	02 • 00 03 • 00	129 41 24 129 56 24	42 30 36 42 16 12		00 45 00 45	49.00 50.00	135 18 00 135 13 48	35 18 36 35 07 12
00	45	04.00	130 01 12	42 09 00		00 45	51.00	135 15 00	35 06 36
00	45	05.00	130 07 12	41 55 48		00 45		135 15 36	35 05 24
00	45	06•00	130 25 12	41 54 36		CO 45	53.00	135 12 00	34 41 24
00	45 45	07•00 08•00	130 30 00 130 45 36	41 40 12 41 29 24		00 45	54.00 55.00	135 12 00 135 21 36	34 19 48 34 08 24
00	45	09.00	130 44 24	41 23 24		00 45		135 24 36	33 42 36
00	45	10.00	130 54 00	41 09 36		00 45		135 12 36	33 16 48
00	45	11.00	130 55 48	41 00 00		00 45	53.00	135 18 <b>3</b> 6	32 41 24
00	45	12.00	131 04 48	40 46 12		00 45		135 16 48	31 21 36
00	45 45	13.00 14.00	131 22 12 131 24 36	40 39 36 40 31 12		00 46		135 13 12 135 22 48	30 40 12 30 11 24
00	45	15.0C	131 33 00	40 17 24		00 46		135 23 24	29 58 48
00	45	16.00	131 49 12	40 11 24		00 46	26.00	141 01 12	27 34 12
00	45	17.00	131 52 48	39 58 48		22 46		141 10 12	27 29 24
00	45 45	18.00 19.00	131 51 36 132 11 24	39 <b>5</b> 2 12 39 39 36		00 44		141 31 48 142 06 00	27 28 48 27 12 36
00			132 10 48	39 34 12		00 4		142 07 12	27 12 36
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00			132 50 24	38 34 12		00 4		143 04 48	26 48 36
00	45	26.00	132 51 00	38 40 48	•	00 4	6 38.00	143 20 24	26 48 36
00			133 01 48	38 32 24			6 39.00	143 14 24	26 41 24
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00			133 21 00	38 02 24			6 42.00	143 12 36	26 18 00
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ŏ			134 30 00				46 53.00	145 09 36	
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PATRICK AFB RADAR STA. XN-2 LAT. 26 36 55 N LONG. 281 39 06 E HT 0014 M 18 MAY 58 HR MIN SEC A2 IMUTH ELEVATION A2 I MUTH HR MIN SEC ELEVATION 005 56 24 005 17 24 005 28 12 005 46 12 006 56 24 34 23 24 34 37 48 34 56 24 35 10 12 35 23 24 40 40 40 40 37 42 36 37 50 24 38 04 48 38 17 24 38 25 12 39 59.00 009 39 00 00 00 14.00 019 39 00 019 20 24 010 19 48 010 27 36 010 48 36 00.00 01.00 02.00 03.00 15.00 16.00 17.00 18.00 40 00 00 00 40 00 00 40 00 007 07 48 007 20 24 007 49 12 007 46 48 008 05 24 35 28 12 35 32 24 35 55 48 36 13 12 04.00 05.00 06.00 07.00 08.00 19.00 20.00 21.00 22.00 010 57 00 011 25 48 011 37 48 012 13 48 38 41 24 38 52 49 39 04 48 39 07 12 40 40 40 40 40 00 00 00 00 40 00 40 40 36 24 36 00 40 23.00 012 13 12 39 36 36 008 06 36 008 57 36 008 57 36 009 20 24 009 12 36 36 47 24 36 57 00 36 55 48 37 13 48 37 34 48 012 21 36 012 44 24 013 16 48 013 21 36 00 40 09.00 00 40 40 40 10.00 00 25.00 26.00 27.00 39 57 00 40 07 48 40 27 36 00 00 40 40 00 40 12.00 40 13.00 40 014 01 12

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00 40 00 40 00 40 00 40	30.00 31.00 32.00	014 09 36 014 24 00 014 37 48 015 04 48 015 20 24	40 43 12 40 53 24 41 14 24 41 31 12 41 36 00	00 41 39.0 00 41 40.0 00 41 41.0 00 41 42.0 00 41 43.0	0 047 08 24 0 047 51 00 0 048 31 12	53 42 00 53 42 00 54 C4 12 54 20 24 54 19 48
00 40 00 40 00 40 00 40	0 35 • 00 0 36 • 00 0 37 • 00	015 34 12 016 10 48 016 10 12 016 33 00 016 54 36	41 57 36 42 04 12 42 10 12 42 29 24 42 43 12	00 41 44.0 00 41 45.3 00 41 46.3 00 41 47.3	00 050 18 00 00 050 59 24 00 051 36 36	54 20 24 54 24 00 54 35 24 54 49 12 54 50 24
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00	41 04.00 41 05.00 41 06.00 41 07.00 41 08.00	027 19 12 028 09 00 028 37 48 028 31 12 029 06 36	48 07 48 48 31 12 49 01 12 49 19 12 48 49 48	00 44 39 00 44 40 00 44 41	000 124 00 36 000 124 55 12 000 125 03 36 000 124 16 48 000 124 19 12	36 42 00 35 48 36
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00 00 00 00	41 29.00 41 30.00 41 31.00 41 32.00 41 33.00	040 31 4 040 53 2 041 37 1 042 09 0 042 42 3	4 52 49 12 2 52 58 12 0 52 54 36	00 45 0 00 <b>45</b> 0 00 <b>45</b> 0	3.00 128 16 1 4.00 128 06 0 5.00 127 29 2 6.00 128 02 2 7.00 128 57 3	0 33 52 48 4 33 51 36 4 33 09 36
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## PATRICK AFB RADAR STA. XN-2 LAT. 26 36 55 N LONG. 281 39 06 E HT 0014 M

HR	MIN	SEC	AZIMUTH	ELEVATION	ня	MIN	SEC	AZIMUTH	ELEVATION
00	45	13.00	128 59 24	32 24 00	00	45	37.00	131 27 36	29 09 00
00	45	14.00	129 01 12	31 55 12	00	45	38.00	131 30 36	29 04 12
00	45	15.00	129 04 48	31 55 48	00	45	39.00	131 25 48	28 46 48
00	45	16.00	129 06 00	32 00 36	00	45	40.00	131 36 00	28 42 36
00	45	17.00	129 14 24	31 48 36	00	45	41.00	131 38 24	28 32 24
00	45	18.00	129 16 48	31 34 12	00	45		131 34 48	28 39 36
00	45	19.00	129 24 36	31 31 12	00	45	43.00	132 13 12	28 46 48
00	45	20.00	129 22 48	31 21 36	00	45	44.00	132 03 36	28 44 24
00	45	21.00	129 33 00	31 09 00	00	45	45.00	132 10 12	28 33 00
00	45	22.00	129 31 12	30 34 48	00	45	46.00	132 09 36	28 23 24
00	45	23.00	129 33 00	30 15 36	00	45	47.00	132 16 12	28 28 12
00	45	24.00	129 52 12	30 51 36	00	45	48.00	132 17 24	28 21 00
00	45	25.00	130 02 24	30 55 48	00	45	49.00	132 11 24	28 00 00
0.0	45	26.00	130 16 12	30 24 00	00		50.00	132 36 36	27 43 12
00	45	27.00	130 20 24	30 16 12	00	45	51.00	133 23 24	26 55 12
00	45	28.00	130 30 00	30 19 48	00		52.00	133 28 48	26 36 00
00	45	29.00	130 48 36	30 19 12	00		53.00	133 31 48	26 12 00
00	45	30.00	130 50 24	29 54 36	0.0		54.00	133 38 24	25 55 48
00		31.00	130 58 12	29 40 48	0.0			134 27 00	25 00 36
00	45	32.00	131 08 24	29 45 36	0.0	45	56.00	134 41 24	23 21 36
00	45	33.00	130 56 24	29 40 48	0.0			135 28 48	22 03 36
00		34.00	131 09 00	29 39 00	0.0			135 13 12	19 57 36
00		35.00	131 10 48	29 29 24	00			135 24 36	
00	45	36.00	131 19 48	29 19 12	00	) 46	00.00	135 28 12	21 43 12

PATRICK AFB THEOO. STA. 1.3 LAT. 28 16 17 N LONG. 278 23 37 E HT 0005 M

					18 MAY 56					
HR	MIN	SEC	AZIMUTH	ELEVATION		HR	MIN	SEC	AZIMUTH	ELEVATION
00	39	56.00	019 56 24	39 46 48		00	40	34.00	035 19 12	46 20 24
00	39	57:00	019 57 00	39 55 12		0.0	40	35.00	035 42 00	46 28 48
00	39	58.00	020 15 36	40 00 36		0.0	40	36.00	035 55 12	46 36 36
00	39	59.00	020 31 48	40 10 48		00	40	37.00	036 29 24	46 44 24
00	40	00.00	021 22 48	40 28 48	•	00	40	38.00	037 14 24	46 53 24
00	40	01.00	021 46 48	40 45 00		00	40	39.00	037 47 24	47 01-12
0.0	40	02.00	022 14 24	40 54 36		0.0	40	40.00	038 13 12	47 09 00
00	40	03.00	022 24 00	41 10 12		00	40	41.00	038 45 36	47 17 24
0.0	40	04.00	022 42 00	41 22 46		00	40	42.00	039 09 36	47 27 00
00	40	05.00	023 01 48	41 29 24		0.0	40	43.00	039 42 36	47 34 12
00	40	06.00	023 39 00	41 36 36		00	40	44.00	040 13 12	47 40 48
00	40	07.00	023 49 48	41 49 12		0.0	40	45.00	040 43 48	47 48 36
00	40	08 • 00	024 21 36	42 00 36		0.0	40	46.00	041 16 48	47 57 36
00	40	09.00	n24 45 00	42 10 48		0.0	42	47.00	041 45 36	48 05 24
00	40	10.00	024 58 48	42 22 12		0.0	40	48.00	042 18 00	48 12 36
00	40	11.00	025 22 12	42 36 00		00	40	49.00	042 48 00	48 18 36
00		12.00	025 51 00	42 46 12		00	40	50.00	043 18 36	48 24 36
00		13.00	025 57 00	42 55 12		00	40	51.00	043 48 00	48 31 12
00		14.00	026 18 36	43 04 48		0.0	40	52.00	044 19 12	48 37 48
00	40	15.00	027 03 36	43 16 12		00	40	53.00	044 53 24	48 43 48
00			027-24 36	43 25 48		00	40	54.00	045 23 24	48 47 24
00			027 54 00	43 33 00		00	40	55.00	045 57 36	48 57 00
00			028 16 48	43 48 00		90	40	56.00	046 10 48	49 04 12
00			028 31 12	43 58 48		00	40	57.00	047 02 24	49 07 48
00	40	20.00	029 07 12	44 07 12		00	40	58.00	047 34 12	49 13 12
00			029 35 24	44 16 12		00	40	59.00	048 08 24	49 19 48
00			029 57 00	44 27 36				00.00	048 45 00	49 24 00
00			030 30 36	44 34 48		00	41	01.00	049 06 00	49 30 36
00			030 42 00	44 46 48		00	_	02.00	049 44 24	49 33 36
00	40	25+00	031 09 36	45 00 00		00	41	03.00	050 16 48	49 38 24
0.0			031 33 36			00		04.00	050 49 12	49 43 12
00			032 09 36						051 27 00	49 48 36
0.0			032 28 12			00			052 00 36	49 52 48
0.0			032 55 48			00			052 39 36	
00	) 40	30.00	033 27 00	45 39 00		00	41	08 • 00	053 06 36	50 02 24
0	0 4	0 31.00	033 55 12			0.0		99.00	053 33 36	50 07 48
0	0 4	0 32.00	034 28 12			0.0		10.00	054 14 24	50 10 12
0	0 4	0 33.00	034 49 48	46 10 48		0.0	41	11.00	054 45 36	50 11 24

HR MIN SEC	AZIMUTH ELEVATION		HR MIN SEC	AZIMUTH	ELEVATION
00 41 12.00 00 41 13.00 00 41 14.00 00 41 15.00 00 41 16.00	054 24 00 50 16 12 054 54 00 50 18 00 056 32 24 50 19 48 057 00 36 50 22 12 057 35 24 50 25 48		00 42 22.00 00 42 23.00 00 42 24.00 00 42 25.00 00 42 26.00	091 54 00 092 19 12 092 43 48 093 10 48 093 34 48	47 18 36 47 11 24 47 03 36 46 58 48 46 49 12
00 41 17.00 00 41 18.00 00 41 19.00 00 41 20.00 00 41 21.00	058 15 36 50 28 48 058 49 48 50 30 36 059 19 48 50 31 12 059 56 24 50 32 24 060 11 24 50 34 12		00 42 27.00 00 42 28.00 00 42 29.00 00 42 30.00 00 42 31.00	094 01 12 094 28 12 094 49 48 095 08 24 095 39 36	46 42 00 46 35 24 46 30 00 46 21 00 46 13 12
00 41 22•00 00 41 23•00 00 41 24•00 00 41 25•00 00 41 26•00	061 07 12 50 35 24 061 43 48 50 37 12 062 17 24 50 39 36 062 50 24 50 40 12 063 18 00 50 40 12		00 42 32.00 00 42 33.00 00 42 34.00 00 42 35.00 00 42 36.00	095 54 00 096 09 36 096 39 00 097 02 24 097 31 12	46 06 36 45 59 24 45 51 36 45 42 00 45 36 00
00 41 27.00 00 41 28.00 00 41 29.00 00 41 30.00 00 41 31.00	063 57 00 50 40 48 064 34 12 50 40 48 065 10 48 50 40 48 065 42 00 50 41 24 066 13 48 50 42 00		00 42 37.00 00 42 38.00 00 42 39.00 00 42 40.00 00 42 41.00	097 48 36 098 03 00 098 29 24 098 56 24 099 19 12	45 28 48 45 22 12 45 14 24 45 07 12 45 00 00
00 41 32.00 00 41 33.00 00 41 34.00 00 41 35.00 00 41 36.00	066 47 24 50 42 00 067 17 24 50 40 12 067 57 36 50 38 24 068 27 36 50 39 00 069 05 24 50 39 00		00 42 42.00 00 42 43.00 00 42 44.00 00 42 45.00 00 42 46.00	099 36 00 099 55 48 100 18 36 100 40 48 101 00 00	44 50 24 44 40 12 44 33 36 44 25 48 44 19 48
00 41 37.00 00 41 38.00 00 41 39.00 00 41 40.00 00 41 41.00	069 33 00 50 37 48 070 10 12 50 36 00 070 43 12 50 33 36 071 16 48 50 30 36 071 47 24 50 28 48		00 42 47.00 00 42 48.00 00 42 49.00 00 42 50.00 00 42 51.00	101 21 00 101 39 36 101 58 48 102 18 36 102 35 24	44 12 00 44 04 12 43 54 36 43 44 24 43 36 36
00 41 42.00 00 41 43.00 00 41 44.00 00 41 45.00 00 41 46.00	072 25 48 50 27 36 072 54 36 50 26 24 073 29 24 50 23 24 074 01 12 50 21 00 074 30 00 50 19 12	·	00 42 52.00 00 42 53.00 00 42 54.00 00 42 55.00 00 42 56.00	103 52 12	43 30 00 43 21 00 43 15 00 43 05 24 42 57 00
00 41 47.00 00 41 48.00 00 41 49.00 00 41 50.00 00 41 51.00	074 51 00 50 15 36 075 39 36 50 13 12 076 13 12 50 10 48 076 43 49 50 06 36 077 14 24 50 02 24		00 42 57.00 00 42 58.00 00 42 59.00 00 43 00.00 00 43 01.00	104 49 48 105 05 24 105 24 00	42 49 12 42 40 48 42 31 48 42 24 00 42 16 48
00 41 52.00 00 41 53.00 00 41 54.00 00 41 55.00 00 41 56.00	077 44 24 49 59 24 078 13 48 49 55 12 078 49 48 49 51 36 079 19 48 49 48 00 079 48 00 49 44 24		00 43 02.00 00 43 03.00 00 43 04.00 00 43 05.00 00 43 06.00	106 14 24 106 34 12 106 48 36	42 07 12 41 59 24 41 49 48 41 42 36 41 33 00
00 41 57.00 00 41 58.00 00 41 59.00 00 42 00.00 00 42 01.00	080 19 12 49 39 00 080 50 24 47 34 48 081 21 36 49 31 12 081 53 24 49 25 48 082 18 36 49 22 12		00 43 07.00 00 43 08.00 00 43 09.00 00 43 10.00 00 43 11.00	107 40 12 107 54 36 108 12 00	41 25 12 41 18 36 41 10 48 41 02 24 40 54 00
00 42 02•00 00 42 03•00 00 42 04•00 00 42 05•00 00 42 06•00	082 54 36 49 17 24 083 13 48 49 11 24 083 43 46 49 05 24 084 12 36 49 00 36 084 43 48 48 55 12		00 43 12.0 00 43 13.0 00 43 14.0 00 43 15.0 00 43 16.0	109 00 36 0 109 15 36 0 109 26 24	40 36 36 40 30 36 40 19 12
00 42 07.00 00 42 08.00 00 42 09.00 00 42 10.00 00 42 11.00	085 40 12 48 45 36 086 14 24 48 40 12 086 31 48 48 33 36		00 43 17.0 00 43 18.0 00 43 19.0 00 43 20.0 00 43 21.0	0 110 15 00 0 110 28 12 0 110 45 00	39 54 00 39 48 00 39 40 12
00 42 12.00 00 42 13.00 00 42 14.00 00 42 15.00 00 42 16.00	087 58 48 48 16 48 088 30 00 48 09 36 038 57 36 48 04 12		00 43 22:0 00 43 23:0 00 43 24:0 00 43 25:0 00 43 26:0	0 111 24 00 0 111 39 00 0 111 58 48	39 13 48 39 06 00 3 39 01 12
00 42 17.00 00 42 18.00 00 42 19.00 00 42 20.00 00 42 21.00	0 089 12 00 47 44 24 0 090 40 48 47 37 48 0 091 09 00 47 31 48		00 43 27.0 00 43 28.0 00 43 29.0 00 43 30.0 00 43 31.0	10 112 31 48 00 112 40 48 00 112 <b>59 2</b> 4	38 33 36 38 24 36 4 38 16 12

			TO MAT 3	• 6				
HR MIN SEC	AZIMUTH	ELEVATION			HR M	IN SEC	AZIMUTH	ELEVATION
00 43 32 0 00 43 33 0 00 43 34 0 00 43 35 0 00 43 36 0	113 41 24 10 113 49 48 10 114 03 36	38 01 12 37 54 36 37 46 12 37 36 00 37 27 36			00 44 00 44 00 44 00 4	4 43.00 4 44.00 4 45.00	124 41 24 124 47 24 124 56 24 125 03 00 125 09 36	29 18 00 29 11 24 29 05 24 29 00 00 28 53 24
00 43 37 e 00 43 38 e 00 43 39 e 00 43 40 e 00 43 41 e	00 114 44 24 00 114 54 00 00 115 06 36	37 20 24 37 04 48 37 04 12 36 57 00 36 48 36				4 48.00	125 15 36 125 20 24 125 28 12 125 32 24 125 40 48	28 46 12 28 40 12 28 33 00 28 26 24 28 18 36
00 43 42 • 00 43 43 • 00 43 44 • 00 43 45 • 00 43 46 •	00 115 42 36 00 115 53 24 00 116 04 12	36 39 36 36 31 48 36 22 48 36 14 24 36 05 24			00 4	52.00 4 53.00 4 54.00 4 55.00 4 56.00	125 47 24 125 51 36 126 02 24 126 09 00 126 15 00	28 12 36 28 04 48 28 00 00 27 53 24 27 48 00
00 43 47 00 43 48 00 43 49 00 43 50 00 43 51 0	00 116 37 48 00 116 49 48 00 117 01 12	36 00 36 35 52 12 35 45 00 35 36 36 35 29 24			00 4	57.00 58.00 64.59.00 65.00.00 65.01.00	126 21 36 126 28 12 126 31 12 126 38 24 126 44 24	27 42 00 27 34 48 27 29 24 27 12 00 27 11 24
00 43 52 0 00 43 53 0 00 43 54 0 00 43 55 0 00 43 56 0	00 117 32 24 00 117 40 12 00 117 53 24	35 21 36 35 14 24 35 05 24 34 58 12 34 51 00			00	45 02.00 45 03.00 45 04.00 45 05.00 45 06.00	126 51 00 127 00 36 127 06 36 127 10 48 127 14 24	27 04 48 27 04 48 26 57 36 26 52 12 26 46 12
00 43 57 00 43 58 00 43 59 00 44 00 00 44 01 0	000 118 36 00 000 118 48 00	34 43 12 34 34 12 34 27 36 34 20 24 34 13 12			00 00	45 07.00 45 08.00 45 09.00 45 10.00 45 11.00	127 18 00 127 24 36 127 31 12 127 39 36 127 47 24	26 37 12 26 31 48 26 25 48 26 19 48 26 13 12
00 44 04	119 05 24 119 13 48 119 24 00 119 33 00 119 42 36	34 04 12 33 57 36 33 49 12 33 41 24 33 34 12				45 12.00 45 13.00 45 14.00 45 15.00 45 16.00	127 51 36 127 57 00 128 03 36 128 09 36 128 13 12	26 07 48 26 03 00 25 57 00 25 51 36 25 45 36
00 44 08 00 44 09 00 44 10	•00     119     52     48       •00     120     01     48       •00     120     13     12       •00     120     21     00       •00     120     30     36	33 25 12 33 18 36 33 11 24 33 03 36 32 57 36				45 17.00 45 18.00 45 19.00 45 20.00 45 21.00	128 17 24 128 23 24 128 28 12 128 34 48 128 39 00	25 39 36 25 33 00 25 27 36 25 21 00 25 15 00
00 44 13 00 44 14 00 44 15	.00 120 38 24 .00 120 51 00 .00 120 59 24 .00 121 09 36 .00 121 15 36	32 51 00 32 42 36 32 35 24 32 28 12 32 19 48			00 00 00	45 22.00 45 23.00 45 24.00 45 25.00 45 26.00	128 43 48 128 51 00 128 57 36 129 00 36 129 09 36	25 07 48 25 03 00 24 57 36 24 51 00 24 45 36
00 44 18 00 44 19 00 44 20	2 • 00	31 51 36			00 00 00 00	45 27.00 45 28.00 45 29.00 45 30.00 45 31.00	129 12 36 129 15 00 129 20 24 129 26 24 129 30 00	
00 44 2 00 44 2 00 44 2	2 • 00 122 05 24 3 • 00 122 15 36 4 • 00 122 23 24 5 • 00 122 33 36 6 • 00 122 45 00	31 31 12 31 24 36 31 16 48			00 00 00 00	45 32.00 45 33.00 45 34.00 45 35.00 45 36.00	129 36 36 129 39 36 129 45 00 129 49 48 129 56 24	24 03 36 23 57 36 23 52 48
00 44 2 00 44 2 00 44 3	7.00 122 47 24 8.00 122 56 24 9.00 122 59 24 0.00 123 04 44 1.00 123 17 24	30 55 12 30 48 00 8 30 40 12	٠		00 00 00 00	45 37.00 45 38.00 45 39.00 45 40.00 45 41.00	130 00 36 130 05 24 150 08 24 130 12 36 130 13 13	23 34 48 23 29 24 23 25 12
00 44 3 00 44 3	12000 123 25 11 13000 123 33 3 14000 123 42 0 15000 123 49 1 16000 123 56 2	6 30 19 48 0 30 14 24 2 30 07 12			00 00 00 00			8 23 10 48 2 23 06 00 8 22 58 12
00 44 00 44 00 44	37.00 124 03 3 38.60 124 12 0 39.00 124 19 4 40.00 124 28 1 41.00 124 32 2	0 29 46 12 8 29 39 36 2 29 33 00			00 00 00 00	45 49.00	130 51 3 130 54 3 131 00 3	6 22 43 48 6 22 38 24 6 22 33 00

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HR	MIN	SEC	AZIMUTH	ELEVATION			HR	MIN	SEC	AZIMUTH	ELEVATION
00 00 00 00	45 45 45 45	52.00 53.00 54.00 55.00 56.00	131 08 24 131 12 00 131 14 24 131 19 48 131 28 12	22 22 12 22 17 24 22 12 36 22 07 12 22 01 12			00	47 47 47	59.00 00.00 01.00 02.00 03.00	135 13 48 135 17 24 135 19 12 135 21 36 135 25 48	16 59 24 16 55 48 16 52 48 16 48 00 16 42 36
00 00 00 00	45 45 45 46 46	57.00 58.00 59.00 00.00	131 33 00 131 35 24 131 39 36 131 42 36 131 49 12	21 55 48 21 49 12 21 45 00 21 40 12 21 34 48			00 00 00 00	47 47 47 47 47	04.00 05.00 06.00 07.00 08.00	135 28 48 135 31 12 135 33 36 135 36 36 135 39 00	16 39 00 16 34 48 16 30 36 16 26 24 16 21 36
00 00 00 00	46 46 46 46	02.00 03.00 04.00 05.00 06.00	131 54 36 131 58 12 132 03 00 132 05 24 132 10 12	21 30 00 21 24 36 21 20 24 21 15 00 21 09 36			00 00 00 00	47 47 47 47 47	09.00 10.00 11.00 12.00 13.00	135 41 24 135 43 48 135 46 48 135 48 36 135 52 12	16 18 00 16 13 48 16 09 00 16 04 12 15 58 48
00 00 00 00	46 46 46 46	07.00 08.00 09.00 10.00	132 13 48 132 16 12 132 19 12 132 22 12 132 25 48	21 04 12 20 58 12 20 54 00 20 49 48 20 43 48			00 00 00	47 47 47 47 47	14.00 15.00 16.00 17.00 18.00	135 55 12 135 58 48 136 01 12 136 04 12 136 06 36	15 55 12 15 51 00 15 47 24 15 43 12 15 38 24
00 00 00 00	46 46 46 46	12.00 13.00 14.00 15.00	132 32 24 132 38 24 132 42 36 .32 45 00 132 47 24	20 40 12 20 34 48 20 29 24 20 25 48 20 19 48			00 00 00 00	47 47 47 47	19.00 20.60 21.00 22.00 23.00	136 09 00 136 12 00 136 15 00 136 16 48 136 19 48	15 33 36 15 29 24 15 20 24 15 22 48 15 18 00
00 00 00 00	46 46 46 46	17.00 18.00 19.00 20.00 21.00	132 52 48 132 57 00 133 00 36 133 04 12 133 07 12	20 15 00 20 10 12 20 04 48 20 00 36 19 55 12			00 00 00	47 47 47 47	24.00 25.00 26.00 27.00 28.00	136 23 24 136 24 36 136 27 00 136 27 36 136 28 48	15 15 00 15 10 48 15 07 12 15 01 48 14 58 12
00 00 00 00	46 46 46 46	22.00 23.00 24.00 25.00 26.00	133 10 12 133 13 48 133 16 48 133 18 00 133 21 00	19 48 36 19 43 48 19 39 36 19 36 36 19 30 00			00 00 00	47 47 47 47 47	29.00 30.00 31.00 32.00 33.00	136 34 48 136 39 00 136 42 36 136 44 24 136 48 36	14 54 00 14 49 48 14 46 12 14 43 12 14 39 00
00 00 00 00	46 46 46 46	27.00 28.00 29.00 30.00 31.00	133 27 00 133 30 36 133 34 12 133 37 48 133 42 36	19 25 48 19 20 24 19 15 00 19 10 48 19 06 00			00 00 00 00	47 47 47	34.00 35.00 36.00 37.00 38.00	136 53 24 136 57 00 137 02 24 137 06 00 137 12 00	14 36 00 14 32 24 14 28 48 14 25 12 14 22 12
00 00 00 00	46	35.00	133 '47 24 133 48 36 133 52 48 133 55 48 133 58 48	19 03 00 18 58 12 18 54 00 18 48 36 18 43 48			00 00 00 00	47 47 47	40.00 41.00 42.00	137 13 48 137 19 12 137 32 24 137 48 00 137 38 24	14 18 36 14 15 00 14 14 24 14 09 36 14 03 00
00 00 00	46 46	38.00 39.00 40.00	134 01 12 134 02 24 134 04 48 134 06 36 134 09 00	18 39 0C 18 34 48 18 30 00 18 25 12 18 20 24			00 00 00	47 47 47	45.00 46.00 47.00	137 35 24 137 31 12 137 34 48 137 22 12 137 21 36	13 57 00 13 46 48 13 45 00
00 00 00	46	43.00 44.00 45.00	134 13 12 134 22 48 134 25 48 134 28 48 134 32 24	18 02 24			00	0 47	7 50.00 7 51.00 7 52.00	137 24 00 137 25 48 137 30 36 137 32 24 137 34 48	13 31 48 13 27 00 13 22 48
00	) 46 ) 46	48.00 49.00 5 50.00	134 36 36 134 43 12 134 45 00 134 47 24 134 49 48	17 49 48 17 43 12 17 39 36			000	0 4	7 55.00 7 56.00 7 57.00	137 37 12 137 39 00 137 41 24 137 42 00 137 42 36	13 12 00 13 09 00 13 06 36
0	0 4	6 53.00 6 54.00 6 55.00	134 52 48 134 55 48 134 56 24 134 59 24 135 03 00	17 26 24 17 22 12 17 19 36			0	0 4	8 00.00	137 43 12 137 46 13 137 50 24 137 54 34 137 58 1	2 12 53 24 4 12 49 48 6 12 45 36
		6 57.00 6 58.00	135 05 24 135 09 0				o	00 4	8 04.00	138 01 1	2 12 39 36

		70 101/1 20			
HR MIN SEC	AZIMOTH ELEVATION		HR MIN SEC	AZIMUTH 6	LEVATION
07 29 00:00 02 29 09:00 02 29 10:00 02 29 11:00 07 29 12:00	260 34 32 19 14 24 260 23 24 19 14 24 260 06 36 19 06 36 259 52 12 19 06 00 259 40 12 19 15 36		02 30 15.00 02 30 19.00 02 30 20.00 02 30 21.00 02 30 22.00	246 28 48 2 246 17 24 246 07 48	20 16 12 20 16 48 10 16 48 20 16 48 20 16 48
02 29 10:00 02 29 16:00 02 29 15:00 02 29 16:00 07 29 17:00	259 28 46 19 15 00 259 16 24 19 19 12 259 03 00 19 21 36 258 52 12 19 24 36 256 42 00 19 27 00		02 30 23.00 02 30 24.00 02 30 25.00 02 30 26.00 02 30 27.00	245 34 48 245 22 48 245 11 24	20 16 12 20 16 12 20 16 12 20 16 12 20 16 12
02 29 18:00 02 29 19:00 02 29 20:00 02 29 21:00 00 29 22:00	256 31 12 19 22 12 258 14 24 19 21 35 258 06 00 19 27 00 257 50 24 19 27 36 257 40 48 19 27 00		02 30 28.00 02 30 29.00 02 30 30.00 02 30 31.00 02 30 32.00	244 35 24 244 24 00 244 13 12	20 16 12 20 16 12 20 16 12 20 16 12 20 16 12
02 29 28+00 03 29 24+00 02 29 25+00 02 29 26+00 01 29 27+00	257 36 38 19 28 12 257 51 12 19 27 36 257 11 48 19 34 12 256 51 36 19 37 12 256 34 48 19 39 00		02 30 33.00 02 30 34.00 02 30 35.00 02 30 36.00 02 30 37.00		20 16 12 20 16 12 20 16 12 20 16 12 20 16 12
02 29 23.00 02 29 29.00 02 29 30.00 02 29 31.00 02 29 32.00	256 27 35 19 39 35 251 18 36 19 40 48 256 07 40 19 42 56 255 58 48 19 45 00 255 50 24 19 45 36		02 30 35.00 02 30 59.00 02 30 40.00 02 30 41.00 02 30 42.00	242 54 36 242 42 36 242 31 48 242 24 00 242 12 00	20 16 12 20 13 12 20 16 12 20 15 36 20 15 00
02 29 33:00 02 29 36:00 02 29 35:00 02 29 36:00 02 29 37:00	255 36 36 19.47 24 255 27 30 19 44 24 255 06 00 19 46 68 254 55 12 19 47 24 254 66 12 19 48 36		02 30 43×00 02 30 44×00 02 30 45×00 02 30 46•00 02 30 47•00	241 57 35 241 46 48 241 36 00 241 24 00 241 13 48	20 13 48 20 13 12 20 13 12 20 13 12 20 13 12 20 12 00
02 29 39+00 02 29 39+00 02 29 40+00 02 29 41+00 02 29 42+00	254 39 36 19 49 48 254 31 12 19 51 00 054 72 48 19 51 00 254 01 12 19 51 35 253 41 24 19 51 36	<u>.</u>	02 30 48,00 92 30 49,00 92 30 50,00 92 30 51,00 92 30 52,00	241 03 00 240 49 12 240 40 12 240 28 12 240 17 24	20 11 24 20 11 24 20 10 48 20 09 36 20 09 36
02 29 43.00 02 39 400 02 29 45.00 02 29 45.00 02 29 47.00	255 52 24 19 52 46 263 23 24 20 02 74 253 15 56 19 52 46 253 06 35 14 52 12 252 52 12 19 51 36		02 30 53.00 02 30 54.00 02 30 55.00 02 30 56.00 02 30 57.00	245 07 48 239 56 24 239 45 36 239 36 00 239 23 24	20 09 36 20 08 24 20 08 24 20 07 48 20 07 48
02 29 48:00 02 29 49:00 02 29 50:00 02 29 51:00 02 29 52:00	252 42 36 19 51 36 252 24 00 19 39 36 252 07 48 20 05 24 251 58 12 20 05 24 251 45 00 19 59 24		02 30 53.00 02 30 59.00 02 31 00.00 02 31 01.00 02 31 02.00	239 12 00 239 00 00 235 50 24 238 39 00 238 28 48	20 06 36 20 06 36 20 06 00 20 05 24 20 04 48
02 29 52:00 02 20 54:00 02 29 35:00 02 29 56:00 02 29 57:00			02 31 03.00 02 31 04.00 02 31 05.00 02 31 06.00 02 31 07.00	238 18 00 238 07 48 237 58 12 237 46 12 237 34 48	20 03 36 20 02 24 20 00 36 20 01 12 20 01 12
07 29 58+09 02 29 59+00 02 30 00+00 02 30 01+00 02 30 02+00	250 27 12 20 07 12 250 12 00 20 07 46 250 03 00 20 09 00	; ; )	02 31 08.00 02 31 09.00 02 31 10.00 02 31 11.00 02 31 12.00	237 24 00 237 12 00 237 03 36 236 58 12 236 45 00	20 00 00 19 59 24 19 57 36 19 57 36 19 57 36
02 30 03.00 02 30 04.00 02 30 05.00 02 39 05.00 02 30 07.00	249 27 35 20 10 1 249 12 00 20 10 1 249 01 12 20 11 2	2	02 31 13.00 02 31 14.00 02 31 15.00 02 31 16.00 02 31 17.60	236 33 00 236 19 48 236 09 00 236 00 00 235 49 12	19 54 36 19 54 36 19 53 24 19 52 48 19 51 36
02 30 08-00 02 30 09-00 02 30 10-60 02 30 11-00 02 30 32-00	248 27 00 20 13 4 248 18 99 20 13 4 248 06 36 20 14 2	8 8 4	02 31 18.00 02 31 19.00 02 31 20.00 02 31 21.00 02 31 22.00	235 38 24 235 25 48 235 20 24 235 08 24 234 55 12	19 51 36 19 50 24 19 48 36 19 48 00 19 46 48
02 30 13-00 02 30 14-00 02 30 15-00 02 30 16-00 02 30 17-00	0 247 28 48 20 15 0 0 247 15 36 20 15 0 0 247 04 48 20 15 0	û 0 0	02 31 23.00 02 31 24.00 02 31 25.00 02 31 26.00 02 31 27.00	234 36 00 234 24 36 234 16 48	19 46 12 19 46 00 19 43 48 19 42 36 19 42 36

HR MIN SEC	AZ IMUTH	ELEVATION	 HR MI	N SEC	AZIMUTH	ELEVATION
02 31 28•00 02 31 29•00	233 58 48 233 45 36	19 40 12 19 38 24	02 32 02 32	38.00	222 57 00 222 48 00	17 49 12 17 47 24
02 31 30·00 02 31 31·00 02 31 32·00	233 34 12 233 22 48 233 14 24	19 37 48 19 36 00 19 34 12	02 32 02 32 02 32	40.00 41.00	222 39 36 222 31 12 222 24 36	17 44 24 17 42 00 17 40 12
02 31 33.00 02 31 34.00 02 31 35.00 02 31 36.00 02 31 37.00	233 03 00 232 53 24 232 41 24 232 33 00 232 22 46	19 34 48 19 33 36 19 31 48 19 30 00 19 29 24	02 32 02 32 02 32 02 32	2 44.00 2 45.00 2 46.00	222 15 36 222 04 48 221 56 24 221 49 48 221 41 24	17 39 00 17 37 12 17 34 48 17 32 24 17 30 36
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02	33	51.00	213 40 48	15 07 48		02 3	4 43.00	208 17 24	13 01 12
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02	33	53.00	213 27 36	15 01 48			45.00	208 06 36	12 57 00
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02	33	56.00	213 06 36	14 55 12			48.00	207 51 36	12 50 24
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02	34	01.00	212 26 24	14 43 12			34 53.00 34 54.00	207 15 36	12 34 12
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02	33	27.00	216	46	48	16	13	48						02	33	39.00	215	31	48	15	42	00	
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01	22	36.00	242 26 24	55 07 12		01	23	27.00	215 33 36	51 16 12
01	22	37.00	241 46 48	55 07 12		01	23	28.00	215 08 24	51 09 00
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01		11.00	223 00 00	53 03 36		0			202 52 48	
01			222 27 00 221 58 12	52 59 24 52 50 24		0			202 38 24	
01			221 31 48	52 43 48		0			202 19 48	
0.1			220 58 12	52 35 24		ŏ			201 45 00	
01	23	16.00	220 25 12	52 31 12		0	1 2	07.00	201 25 48	45 39 00
0 :		17.00	219 54 36	52 27 00		0	1 2	4 08.00	201 09 36	45 29 24
0			219 27 36 219 06 00	52 22 48 52 15 00		0			200 51 36	
0			218 38 24	52 09 00		0			200 33 30 200 22 12	
0:	23	21.00	218 12 00	52 00 00	•					
•			00	25 00						

	P	ATRICK A	FB	OPT	TR	STA.	4.	ι	LAT	25	16	03	H	LONG.	283	41 12 E	H1	00	37 Þ	1		
										19	YAK	58										
HR	MIN	SEC	AZ	IMU	TH	ELI	EVA'	LION						HR	MIN	SEC	AZ	MU1	Н	ELE	EVAT	TION
02	40	51.00	207	42	00	36	00	00						02	41	01.00	207	36	00	36	01	12
02	40	52.00	207	42	00	36	07	12						02	41	02.00	207				03	
02	40	53.00	207	42	00	36	07	48						02	41	03.00	207	36	00		03	
02	40	54.00	207	42	00	36	07	48						02	41	04.00	207	36	00		03	
02	40	55.00	207	42	00	36	07	48						02	41	05.00	207	36	00		03	
02	40	56.00	207	42	00	36	01	12						02	41	06.00	207	36	00	36	03	00
02	40	57.00	207	42	00	36	01	12						02	41	07.00	207	34	12	35	59	24
02	40	58.00	207	42	00	36	01	12						02	41	08.00	207	28	48	35	57	36
02	40	39.00	207	37	48	36	01	12						02	41	09.00	207	26	24			12
02	41	00.00	207	36	00	36	01	12						02	41	10+00	2 07				48	

PATRICK AFB OPT-TR STA. 4.1 LAT. 25 16 03 N LONG. 283 41 12 E HT 0037 M

					19 MAI 30					
HR	MIN	<b>\$</b> EC	AZIMUTH	ELEVATION		HR	MIN	SEC	AZIMUTH	ELEVATION
02	41	11.00	207 16 48	35 48 36		02	43	04.00	189 13 48	25 16 12
02	41	32.00	201 22 12	34 23 24		02		05.00	189 12 00	25 18 36
02	41	33.00	200 55 12	34 01 12		02	43	06.00	169 11 24	25 15 36
02	41	34.00	200 55 12	33 54 00		02	43	07.00	189 04 48	25 01 12
02	41	35.00	200 47 24	33 40 48		02	43	08.00	188 52 48	24 57 36
02	41 41	36.00	200 25 12	33 31 12		02 02	43 43	09.00 10.00	188 47 24 188 47 24	24 49 12 24 42 36
02 02	41	37.00 38.00	200 17 24 199 56 24	33 33 36 33 36 00	-	02	43	11.00	188 47 24	24 36 00
02	41	39.00	199 54 36	33 31 12		02	43	12.00	188 47 24	24 28 12
02	41	40.00	199 43 12	33 26 24		02	43	13.00	188 47 24	24 11 24
	41	41.00	199 43 12	33 11 24		02		14.00	188 47 24	24 13 48
	41	42.00	199 31 12	33 03 36				15.00	188 31 12	24 07 48
02 02	41 41	43 • 00 44 • 00	199 31 12 199 10 48	32 54 36 32 37 12		02 02	43	16.00 17.00	188 27 36 188 11 24	24 00 36 23 50 24
02	41	45.00	198 49 12	32 33 36		02	43	18.00	188 11 24	23 35 24
02	4 İ	46.00	198 24 36	32 28 12		02	43	19.00	188 04 48	23 22 12
02	41	47.00	198 02 24	32 28 12		02	43	20.00	188 04 12	23 28 12
02	41	48.00	197 44 24	32 33 00		02	43	21.00	187 59 24	23 24 00
02	41	49.00	197 45 00 197 52 48	32 31 48 32 21 36		02 02	43 43	22.00 23.00	187 55 12 187 48 00	23 26 24 23 24 00
02	41	50+00								
02	41	51.00	197 51 36	32 10 48		02	43	24.00	187 46 12	23 19 12
02	41 41	52 • 00 53 • 00	197 41 24 197 15 36	32 09 00 32 08 24		02 02	43 43	25.00 26.00	187 46 12 187 40 12	23 05 24 22 41 24
02	41	54.00	196 46 48	32 00 36		02	43	27.00	187 40 12	22 45 36
02	41	55.00	196 25 48	31 58 12		02	43	28.00	187 40 12	22 34 48
02	41	56.00	196 15 36	31 50 24		02			187 40 12	22 21 36
02	41	57.00	195 40 12	31 35 24		02			187 40 12	22 05 24
02		58.00	195 28 12 195 16 48	31 13 12 30 38 24		02 02			187 35 24 173 01 12	22 12 36 13 00 36
02 0 <b>2</b>	41 42	59•00 00•00	194 52 12	30 22 48		02			173 01 12	13 03 36
02	42	01.00	194 52 12	30 13 48		02	45	45.00	173 01 12	13 04 12
02	42	02.00	194 49 12	30 08 24		02			173 01 12	13 07 12
02			194 37 12	29 46 12		0.2			173 01 12	13 01 48
02			194 18 00 193 55 12	29 38 24 29 22 12		02			173 OI 12 172 59 24	13 01 48 13 02 24
02			193 48 26	29 04 12		02			172 59 24	
02	42		193 38 24 193 31 12	29 01 12 28 48 00		02			172 59 24 172 59 24	
02			193 21 36			0 2			172 58 48	
02			193 08 24			0 2			172 57 36	
02			193 06 36			02			172 58 12	
02			193 05 24			02			173 02 24	
02			192 53 24			02			173 01 48 173 01 48	
0.			192 52 48 192 52 12			0;			173 01 48	
					•					
0.			190 09 36 190 07 48			0;			173 01 48 173 00 36	
Ö			189 43 12			0			173 00 30	
ŏ			189 43 12			0			173 01 48	
ō			189 36 36	25 30 36		0		6 04.00	173 01 48	
0	2 4	3 02 • 00	189 22 12	2 25 30 36		0	2 4	6 05.00	172 59 24	12 57 36
0	2 4	3 03.00	189 20 24	4 25 22 48		0	2 4	6 06.00	172 57 36	12 54 36

	PA	TRICK	AFB OPT.TE	R STA. 4.1	LAT. 25 16 03 N	LONG. 2	283 41	12 E	HT 0037-M	
					20 MAY 58					
HR	MIN	SEC	AZIMUTH	ELEVATION		HR M	MIN S	EC /	AZIMUTH	ELEVATION
00	14	55.00	029 16 13	2 59 01 12		00	15 05	•00 0:	36 27 36	60 43 12
00	14	56.00	030 12 3	6 58 54 36		00	15 06	•00 0:	37 16 48	60 51 00
00	14	57:00	030 57 3	6 59 06 36		00	15 07	.00 0	38 00 00	61 10 12
00	14	58.00	031 49 4	8 59 16 48		00	15 08	.00 0	38 37 48	61 15 00
00	14	59.00	032 25 1	2 59 30 36		00	15 09	•00 0	39 34 48	61 40 48
00	15	00 • 00	033 02 2	4 59 46 12		00	15 10	•00 0	40 07 12	61 39 36
00	15	01.00	033 46 1	2 59 55 48		00	15 11	.00 0	41 00 36	61 58 12
00	15	02.00	034 34 4	8 60 03 00		00	15 12	• 00 0	41 47 24	62 03 36
00	15	03.00	035 07 1	2 60 13 12		00	15 13	.00 0	42 36 00	62 15 36
00	15	04.00	035 43 1	2 60 25 48		00	15 14	•00 0	43 19 12	62 18 36

					23 1.11. 30						
HR I	MIN	SEC	AZIMUTH	ELEVATION		HR	M	[N :	SEC	AZIMUTH	ELEVATION
00 00 00	15 15 15	15.00 16.00 17.00 18.00 19.00	044 12 00 044 59 24 045 48 36 046 48 36 047 49 48	62 27 00 62 33 C0 62 44 24 62 51 36 63 14 24		00 00 00	10	6 2 6 2 6 2	5•00 6•00 7•00 8•00 9•00	101 14 24 102 12 00 102 49 48 103 10 12 103 54 36	61 33 36 61 20 24 61 24 36 61 14 24 61 01 48
00 00 00	15	20.00 21.00 22.00 23.00 24.00	048 28 12 049 20 24 050 08 24 051 06 00 052 03 36	63 12 36 63 24 36 63 23 24 63 25 48 63 36 36		00 00 00 00	1 1	6 3 6 3 6 3	0.00 1.00 2.00 3.00 4.00	104 27 36 104 54 36 105 28 12 106 03 36 106 28 12	60 57 36 60 33 36 60 24 36 60 00 00 60 03 00
00 00 00	15 15 15 15 15	25 • 00 26 • 00 27 • 00 28 • 00 29 • 00	052 54 36 053 45 36 054 29 24 055 19 12 056 02 24	63 43 12 63 54 36 64 03 36 64 15 36 64 16 48		00 00 00	) 1 ) 1 ) 1	6 3 6 3 6 3	5.00 6.00 7.00 8.00	106 50 24 107 10 48 107 46 12 108 38 24 109 09 00	59 59 24 59 42 00 59 36 36 59 15 00 59 02 24
00 00 00 00	15 15 15 15 15	30.00 31.00 32.00 33.00 34.00	057 07 12 058 13 12 059 07 12 059 56 24 060 37 12	64 17 24 64 20 24 64 22 12 64 36 36 64 43 12		0 0 0 0 0	0 1	6 4	40.00 41.00 42.00 43.00	109 18 36 110 00 36 110 11 24 110 43 12 111 09 36	58 49 48 58 42 00 58 34 48 58 25 12 58 00 00
00 00 00 00	15 15 15 15 15	35.00 36.00 37.00 38.00 39.00	061 29 24 062 42 36 053 46 12 064 37 48 065 13 36	64 43 48 64 49 12 64 46 12 64 48 36 64 43 48			0 :	16 16	45.00 46.00 47.00 48.00 49.00	111 33 36 112 01 12 112 19 12 112 51 36 113 33 36	56 04 12 57 42 00 57 30 36 57 19 48 57 06 36
00 00 00 00	15 15 15 15 15	40.00 41.00 42.00 43.00 44.00	065 52 12 056 55 12 068 29 24 069 13 12 070 10 12	64 51 00 64 55 48 64 53 24 65 04 12 65 09 36		0	0	16 16 16	50.00 51.00 52.00 53.00 54.00	114 10 48 113 49 12 114 14 24 114 42 36 115 06 36	56 49 12 56 41 24 56 34 12 56 19 48 56 10 12
00 00 00 00	15 15 15 15 15	45.00 46.00 47.00 48.00 49.00	070 50 24 071 26 24 072 32 24 073 35 24 074 25 12	65 07 12 65 01 12 64 59 24 64 59 24 65 05 24		(	00	16	55.00 56.00 57.00 58.00 59.00	115 30 36 115 45 36 116 16 48 116 37 12 117 06 36	56 00 00 55 54 36 55 35 24 55 15 00 55 08 24
00 00 00 00	15 15 15 15 15	50.00 51.00 52.00 53.00 54.00	075 25 48 076 19 12 077 00 36 077 57 36 079 09 00	65 04 48 64 57 00 65 01 48 64 55 48 64 52 48			00	17 17 17 17	00.00 01.00 02.00 03.00 04.00	117 10 48 117 41 24 118 08 24 118 17 24 118 38 24	54 55 12 54 35 24 54 33 00 54 23 24 54 07 12
00 00 00 00	15 15 15 15	55.00 56.00 57.00 58.00 59.00	079 49 12 080 28 48 081 07 12 091 43 48 032 33 36	64 44 24 64 50 24 65 05 24 64 45 36 64 36 00			00 00 00 00	17 17 17 17	05.00 06.00 07.00 08.00 09.50	118 39 00 119 00 00 119 19 12 119 40 12 119 55 48	54 07 48 53 41 24 53 37 48 53 28 12 53 12 36
00 00 00 00		02.00	083 26 24 084 12 00 085 17 24 086 16 12 086 48 00	64 38 24 64 26 24 64 30 36 64 27 36 64 24 00			00 00 00 00	17 17 17 17	10.00 11.00 12.00 13.00 14.00	120 10 48 120 36 36 121 07 48 121 11 24 121 23 24	53 03 00 52 58 12 52 41 24 51 52 12 51 32 24
00 00 00	16 16 16	06 • 00 07 • 00 08 • 00	087 41 24 088 37 48 089 34 12 089 51 36 090 51 00	64 10 12 64 08 24 64 05 24 63 52 12 63 46 48			00 00 00 00	17 17 17 17	15.00 16.00 17.00 18.00 19.00	121 57 36 122 14 24 122 36 00 123 04 48 123 01 48	50 23 24 50 07 12 50 04 12
69 00 00 00	16 16 16	11.00 12.00 13.00	091 32 24 092 34 12 093 07 43 093 55 12 094 38 24	63 37 12 63 26 24 63 23 24			00 00 00 00	17 17 17 17 17	20.00 21.00 22.00 23.00 24.00	123 27 36 123 43 12 123 56 24 124 42 36 125 14 24	48 46 12 48 14 24 47 51 36
00 00 00	0 16	6 16.00 6 17.00 6 18.00	095 12 00 096 04 12 096 33 36 097 20 24 097 57 36	62 55 12 62 51 36 62 41 24			00 00 00 00	17 17 17 17	25.00 26.00 27.00 28.00 29.00	125 17 24 125 30 00 126 00 00 126 42 30 126 37 13	47 12 36 45 51 00 44 26 24
00 00 00 00	0 1 0 1 0 1	6 21.00 6 22.00 6 23.00	098 39 00 099 07 12 099 49 12 100 22 12 100 52 46	2 62 10 48 2 62 05 24 2 61 43 12			00 00 00 00	17 17 17 17	33.G0	127 04 4 126 57 0 126 51 0 126 46 1 126 09 0	0 39 06 00 9 38 24 36 2 36 16 12

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HR	MIN	SEC	AZIMUTH	ELEVATION			HR F	IN SEC	AZIMUTH	ELEVATION
00 00 00 00	17 17 17 17 17	39.00 40.00 41.00 42.00 43.00	127 04 12 127 22 12 127 37 48 127 48 00 128 03 36	45 37 12 45 13 48 45 40 12 45 32 24 44 45 36			00	18 47.00 18 48.00 18 49.00 18 50.00 18 51.00	135 52 48 136 01 12 136 09 00 136 10 48 136 21 00	36 01 48 36 03 00 35 57 00 35 49 12 35 45 36
00 00 00 00	17 17 17 17	44.00 45.00 46.00 47.00 48.00	128 42 00 129 40 12 131 07 48 132 04 48 131 51 00	43 44 24 43 10 48 42 58 12 41 48 36 41 53 24			00 00	18 52.00 18 53.00 18 54.00 18 55.00 18 56.00	136 22 12 136 36 36 136 33 00 136 36 00 136 37 12	35 32 24 35 24 C0 35 10 48 34 58 12 34 34 12
00 00 00 00	17 17 17 17	49.00 50.00 51.00 52.00 53.00	129 13 48 129 14 24 129 38 24 129 36 00 129 38 24	41 47 24 45 25 48 44 24 36 44 06 36 44 12 36				18 57.00 18 58.00 18 59.00 19 00.00 19 01.00	136 48 00 136 47 24 137 01 12 137 02 24 137 01 48	34 34 12 34 24 36 34 24 00 34 18 00 34 10 12
00 00 00 00	17 17 17 17 17	54.00 55.00 56.00 57.00 58.00	129 45 36 130 00 00 129 58 48 130 14 24 130 22 48	44 12 36 44 12 00 44 05 24 43 55 48 43 55 12		•	00 00 00 00	19 02.00 19 03.00 19 04.00 19 05.00 19 06.00	137 13 12 137 13 12 137 34 48 137 34 48 137 54 00	34 07 48 33 54 36 33 15 00 33 02 24 32 22 12
00 00 00 00	17 18 18 18	59.00 00.00 01.00 02.00 03.00	130 22 48 130 36 36 130 42 36 130 43 48 130 59 24	43 38 24 43 29 24 43 15 36 43 14 24 42 58 48			00 00 00 00	19 07.00 19 08.00 19 09.00 19 10.00 19 11.00	138 00 36 138 03 36 138 12 00 138 19 12 138 36 36	32 06 00 31 52 12 31 41 24 31 06 36 31 03 36
00 00 00 00		04.00 05.00 06.00 07.00 08.00	131 09 00 131 21 36 131 27 36 131 36 00 131 36 00	42 52 12 42 42 36 42 31 12 42-30 36 42 21 00			00 00 00 00	19 12.00 19 13.00 19 14.00 19 15.00 19 16.00	138 37 48 138 52 12 139 11 24 139 42 00 139 51 00	30 50 24 30 18 36 30 15 00 30 01 12 29 52 12
00 00 00	18 18	12.00	131 40 12 131 52 12 131 59 2 132 15 36 132 17 24	42 04 12 41 52 48 41 45 00 41 25 48 41 28 12			00 00 00	19 17.00 19 18.00 19 19.00 19 20.00 19 21.00	140 26 24 140 36 00 141 02 24 140 49 12 140 50 24	29 29 24 29 22 12 29 02 24 28 54 00 28 40 12
00	) 18 ) 18 ) 18	15.00 16.00 17.00	132 26 24 132 29 24 132 42 00 132 42 00 132 59 24	41 18 00 40 56 24 40 56 24 40 43 12 40 33 00			00 00 00 00	19 22.00 19 23.00 19 24.00 19 25.00 19 26.00	140 57 36 140 58 12 141 05 24 141 22 12 141 26 24	28 34 12 28 24 36 28 13 12 27 49 12 27 16 48
00	0 1 0 1 0 1	20.00 3 21.00 6 22.00	133 00 36 133 09 00 133 14 24 133 24 00 133 37 48				00 00 00 00	19 27.00 19 28.00 19 29.00 19 30.00 19 31.00	141 25 12 141 39 00 141 40 12 141 46 48 141 54 00	26 42 36 26 37 12 26 36 00
0	0 1 0 1 0 1 0 1	8 25.00 8 26.00 8 27.00	133 37 48 133 43 48 133 51 36 133 56 24 134 08 24	39 27 36 39 20 24 39 11 24			00 00 00 00	19 33.00 19 34.00 19 35.00	141 54 00 141 54 36 141 55 48 142 02 24 141 54 36	26 36 36 3 26 36 36 4 26 31 12
Ċ	00 1	8 29.00 8 30.00 8 31.00 8 32.00 8 33.00	134 09 00 134 11 24 134 13 12 134 29 24 134 37 12	38 43 12 2 38 33 00 4 38 12 36			0 0 0 0 0 0	19 38.00 19 39.00 19 40.00	141 56 24 141 56 24 141 57 0	4 26 34 12 4 26 34 12 0 26 34 12
(	00 1 00 1	8 34,00 8 35,00 8 36,00 18 37,00 18 38,00	134 38 24 134 50 24 134 50 24 134 57 34 135 01 1	4 37 54 00 4 37 40 12 6 37 30 36			00	19 43.00 19 44.00 19 45.00	141 56 2 141 56 2 141 57 3	4 26 34 12 4 26 33 00 6 26 33 00
	00 00	39.00 18 40.00 16 41.00 18 42.00 18 43.00	135 19 1 135 15 0 135 22 4 135 29 2 135 32 2	0 37 12 00 8 36 58 12 4 36 54 00			00	0 19 48.00 0 19 49.00 0 19 50.00	141 58 4 141 58 4 142 00 3	8 26 33 00 8 26 24 36 6 26 19 12
	00	18 44.00 18 45.00 18 46.00	135 44 2	4 36 21 36			0 0 0	0 19 53.0	0 142 04 1	2 26 16 48

PATRICK AFB THEOD. STA. 1.50 LAT. 28 24 29 N LONG. 279 24 09 E HT 0012 M

					EU MAI	, ,				
HR	HIN	SEC	AZIMUTH	ELEVATION			HR	MIN SEC	AZIMUTH	ELEVATION
00 00 00 00	14 14 14	43 • 00 44 • 00 45 • 00 46 • 00 47 • 00	074 33 00 075 48 36 077 14 24 078 04 12 079 02 24	51 44 24 51 45 36 51 33 36 51 25 12 51 19 12			00 00	15 47.00 15 48.00 15 49.00 15 50.00 15 51.00	118 46 12 119 07 12 119 26 24 119 47 24 120 05 24	35 53 24 35 39 00 35 22 12 35 07 12 34 51 00
00 00 00 00	14 14 14	48.00 49.00 50.00 51.00 52.00	080 12 00 081 10 12 082 12 00 083 18 36 084 17 24	51 10 12 51 00 36 50 49 48 50 41 24 50 31 12				15 52.00 15 53.00 15 54.00 15 55.00 15 56.00	120 25 48 120 45 36 121 01 48 121 22 12 121 42 00	34 36 00 34 20 24 34 05 24 33 49 48 33 34 12
00 00 00 00	14 14 14 14	53.00 54.00 55.00 56.00 57.00	085 17 24 086 14 24 087 12 00 088 12 36 089 08 24	50 20 24 50 08 24 49 55 12 49 43 48 49 31 48			00 00 00 00	15 57.00 15 58.00 15 59.00 16 00.00 16 01.00	121 58 12 122 14 24 122 31 12 122 49 12 123 05 24	33 18 36 33 04 48 32 48 36 32 32 24 32 18 36
00 00 00 00	14 14 15 15	58.00 59.00 00.00 01.00 02.00	070 00 00 090 52 12 091 43 12 092 41 24 093 33 36	49 16 48 49 04 12 48 49 48 48 36 36 48 22 48			00 00 00	16 02.00 16 03.00 16 04.00 16 05.00 16 06.00	123 19 12 123 36 36 123 54 00 124 08 24 124 20 24	32 05 24 31 50 24 31 35 24 31 21 36 31 06 36
00 00 00 00	15 15 15 15	03.00 04.00 05.00 06.00 07.00	094 21 00 095 09 36 096 01 12 096 49 48 097 34 12	48 06 36 47 51 00 47 35 24 47 22 48 47 06 36			00 00 00 00	16 07.00 16 08.00 16 09.00 16 10.00 16 11.00	124 39 00 124 54 36 125 07 12 125 21 36 125 36 00	30 54 00 30 40 12 30 25 48 30 11 24 29 57 36
00 00 00 00	15 15 15 15	08.00 09.00 10.00 11.00 12.00	098 21 00 099 03 00 099 41 48 100 30 00 101 12 36	46 49 12 46 33 00 46 17 24 46 00 36 45 43 48			00 00 00 00	16 12.00 16 13.00 16 14.00 16 15.00 16 16.00	125 50 24 126 04 12 126 15 00 126 28 48 126 40 48	29 43 48 29 31 12 29 17 24 29 03 36 28 49 48
00 00 00 00	15 15 15	13.00 14.00 15.00 16.00 17.00	101 55 48 102 33 36 103 14 24 103 53 24 104 34 12	45 37 36 41 10 48 44 54 36 44 38 24 44 21 00			00 00 00	16 17.00 16 18.00 16 19.00 16 20.00 16 21.00	126 57 36 127 09 00 127 21 00 127 33 00 127 43 12	28 10 48 27 57 36
00 00 00	15 15 15	18.00 19.00 20.00 21.00 22.00	105 13 12 105 47 24 106 18 36 107 01 48 107 33 00	44 04 48 43 46 48 43 10 00 43 12 00 42 54 00			00 00 00 00	16 22.00 15 23.00 16 24.00 16 25.00 16 26.00	127 57 00 128 09 00 128 18 00 128 31 12 128 41 24	27 19 12 27 08 24 26 55 12
00 00 00 00	15 15 15	23.00 24.00 25.00 26.00 27.00	108 05 24 108 39 36 109 15 00 109 45 00 110 15 36	42 37 48 42 20 24 42 02 24 41 46 12 41 28 48			00 00 00	16 29.00 16 30.00	128 54 00 129 06 00 129 15 00 129 25 12 129 35 24	26 17 24 26 05 24 25 53 24
00	0 15 0 15 0 15	28.00 29.00 30.00 31.00 32.00	110 46 12 111 19 48 111 45 36 112 14 24 112 41 24	41 12 36 40 55 48 40 39 36 40 20 24 40 03 00			00 00 00 00	16 33.00 16 34.00 16 35.00	129 45 36 129 58 12 130 07 48 130 17 24 130 27 00	2 25 18 36 3 25 07 12 4 24 54 00
0	0 15	34.00 35.00 36.00	113 09 36 113 36 36 114 02 24 114 30 36 114 53 24	39 28 48 39 11 24 38 54 00				15 38.00 16 39.00 16 40.00	130 44 24 131 06 34 131 30 34	4 24 20 24 5 24 09 00 6 23 57 36
0	0 15	38.00 39.00 40.00 41.00 42.00	115 20 24 115 45 36 116 06 00 116 31 48 116 52 12	38 04 48 37 47 24 37 31 48			0 0 0 0 0 0	0 16 43.00 0 16 44.00 0 16 45.00	131 43 4 131 39 0 131 50 2	8 23 23 24 0 23 14 24 4 23 03 00
(	00 1	43.00 44.00 5 45.00 5 46.00	118 01 4	36 42 36 36 27 00			01	0 16 47.00 0 16 48.00 0 16 49.00	132 13 1	2 22 31 12

					20 MAY 58					
HR	NIM	SEC	AZIMUTH	ELEVATION			HR A	IN SEC	AZIMUTH	ELEVATION
00 00 00 00	14 14 14 14	43.00 44.00 45.00 46.00 47.00	074 34 12 075 08 24 075 42 00 076 17 24 076 48 36	51 55 12 51 52 48 51 48 36 51 45 36 51 41 24	4		00	15 53.00 15 54.00 15 55.00 15 56.00 15 57.00	105 13 48 105 30 36 105 49 48 106 09 00 106 24 36	44 09 00 44 01 48 43 51 36 43 40 48 43 33 00
00 00 00 00	14 14 14 14	48.00 49.00 50.00 51.00 52.00	077 22 48 077 55 12 078 27 00 079 01 12 079 33 00	51 37 48 51 34 12 51 30 36 51 25 48 51 22 48			00 00	15 58.00 15 59.00 16 00.00 16 01.00 16 02.00	106 46 12 107 00 36 107 20 24 107 36 36 107 54 36	43 28 12 43 18 00 43 09 00 43 00 36 42 51 00
00 00 00	14. 14. 14. 14. 14.	53.00 54.00 55.00 56.00 57.00	080 04 12 080 34 12 081 07 48 081 40 48 082 12 36	51 18 00 51 13 48 51 08 24 51 04 48 51 00 36			00 00	16 03.00 16 04.00 16 05.00 16 06.00 16 07.00	108 10 12 108 28 12 108 45 00 109 01 12 109 18 00	42 43 12 42 34 12 42 26 24 42 18 00 42 08 24
00 00 00 00	14 14 15 15	58.00 59.00 00.00 01.00 02.00	082 43 12 083 15 36 083 44 24 084 15 36 084 45 36	50 54 00 50 48 36 50 44 24 50 39 36 50 33 36			00 00	16 08.00 16 09.00 16 10.00 16 11.00 16 12.00	109 33 00 109 48 00 110 03 36 110 18 00 110 32 24	41 59 24 41 51 36 41 41 24 41 33 36 41 23 24
00 00 00 00	15 15 15 15	03.00 04.00 05.00 06.00 07.00	085 16 48 085 45 36 086 10 48 086 42 36 087 13 12	50 28 12 50 22 12 50 15 36 50 09 36 50 03 36				16 13.00 16 14.00 16 15.00 16 16.90 16 17.00	110 51 00 111 04 12 111 18 36 111 33 00 111 48 00	41 17 24 41 07 48 40 57 36 40 49 12 40 41 24
00 00 00 00	15 15	08.00 09.00 10.00 11.00 12.00	087 41 24 088 07 12 088 36 00 089 02 24 089 32 24	49 58 12 49 51 36 49 45 36 49 40 48 49 33 36		,	00 00 00 00	16 18.00 16 19.00 16 20.00 16 21.00 16 22.00	112 G4 12 112 19 48 112 34 12 112 46 12 113 00 36	40 33 36 40 25 12 40 18 00 40 09 00 39 59 24
00 00 00	15 15 15	13.00 14.00 15.00 16.00 17.00	090 56 24 090 29 24 090 56 24 091 20 24 091 46 48	49 26 24 49 19 12 49 12 36 49 04 12 48 58 12			00 00 00 00	16 23.00 16 24.00 16 25.00 16 26.00 16 27.00	113 14 24 113 27 36 113 42 00 113 54 36 114 09 00	39 49 12 39 40 12 39 31 48 39 25 12 39 17 24
00	15 15 15	21.00	092 13 12 092 42 36 093 09 36 093 34 12 093 57 36	48 50 24 48 44 24 48 37 12 48 28 12 48 21 00			00 00 00	16 28.00 16 29.00 16 30.00 16 31.00 16 32.00	114 22 12 114 36 36 114 48 00 115 00 00 115 12 36	39 09 36 38 59 24 38 52 12 38 44 24 38 36 36
00	15 0 15 0 15	24+00 25+00 26+00	094 25 12 094 48 00 095 12 00 095 36 00 096 00 36	48 14 24 48 07 48 47 58 48 47 50 24 47 42 36			00 00 00 00	16 33.00 16 34.00 16 35.00 16 36.00 16 37.00	115 25 48 115 39 00 115 49 48 116 01 48 116 14 24	38 27 36 38 17 24 38 10 12 38 01 48 37 52 48
0 0	0 15 0 15 0 15	29.00 30.00 31.00	096 25 48 096 51 00 097 13 48 097 36 00 097 58 12	47 36 00 47 28 48 47 11 00 47 12 36 47 04 48			00 00 00 00	16 38.00 16 39.00 16 40.00 16 41.00 16 42.00	116 25 12 116 38 24 116 51 00 117 00 00 117 13 12	37 44 24 37 35 24 37 26 24 37 17 24 37 11 24
0	0 15 0 15 0 15 0 15 0 15	34.00 35.00 36.00	098 22 12 098 43 12 099 07 12 099 30 36 099 49 48	46 49 12 46 40 48 46 33 36			00 00 00 00	16 43.00 16 44.00 16 45.00 16 46.00 16 47.00	117 23 24 117 33 36 117 46 12 117 55 48 118 06 36	36 56 24 36 47 24 36 40 12
0	0 1: 0 1: 0 1: 0 1: 0 1:	5 39.00 5 40.00 5 41.00	100 13 48 100 33 36 100 57 00 101 18 36 101 37 48	46 07 48 45 58 48 45 52 12			00 00 00 00	16 50.00	118 21 00 118 30 00 118 39 36 118 52 48 119 00 36	36 13 48 36 04 48 35 58 12
(	00 1 00 1 00 1 00 1	5 44.00 5 45.00 5 46.00	101 58 12 102 19 48 102 40 12 103 01 48 103 20 24	45 28 48 2 45 17 24 3 45 09 00			00 00 00 00	16 54.00 16 55.00 16 56.00	119 10 12 119 22 48 119 31 12 119 40 12 119 51 36	35 33 36 35 26 24 35 19 12
	00 1	5 49 • 00 5 50 • 00	103 40 13 104 00 00 104 18 30 104 40 13 104 55 13	0 44 43 12 6 44 36 00 2 44 27 36			00 00 00	16 59.00 17 00.00 17 01.00	120 30 30	34 55 48 34 47 24 34 39 36

PA	TRICK	AFB	THE00.	STA. 1.40	LAT.	28	27	58	N	LONG.	279	24	38	Ε	нТ	0010	M
						20	MAY	58									
IN	SEC		AZ IMUTH	ELEVATION.						HR	MIN	S	EC		AZI	40714	Ε

HR	MIN	SEC	AZIMUTH	ELEVATION		HR M1	N SEC	AZIMUTH	ELEVATION .
00 00 00 00	17 17 17 17 17	03.00 04.00 05.00 05.00 07.00	120 49 12 121 00 00 121 09 00 121 17 24 121 26 24	34 21 36 34 16 12 34 08 24 34 01 12 33 54 36		00 18 00 18 00 18 00 18	02.00 03.00 04.00	128 01 48 128 06 36 128 12 36 128 18 00 128 24 00	27 36 00 27 29 24 27 22 12 27 16 12 27 10 12
00 00 00 00	17 17 17 17 17	08 • 00 09 • 00 10 • 00 11 • 00 12 • 00	121 35 24 121 43 48 121 54 00 122 02 24 122 12 00	33 45 00 33 37 48 33 30 36 33 21 36 33 15 36		00 1: 00 1: 00 1: 00 1	8 07.00 8 08.00 8 09.00	128 29 24 128 36 36 128 42 00 128 48 00 128 52 48	27 03 00 26 58 12 26 51 00 26 45 00 26 38 24
00 00 00 00	17 17 17 17 17	13.00 14.00 15.00 16.00 17.00	122 20 24 122 29 24 122 37 48 122 45 36 122 53 24	33 07 12 33 00 36 32 52 48 32 45 00 32 37 48			8 12.00	128 57 36 129 02 24 129 09 00 129 15 00 129 19 48	26 34 12 26 28 48 26 21 00 26 07 12 26 08 24
00 00 00 00	17 17 17 17 17	18.00 19.00 20.00 21.00 22.00	123 01 48 123 10 12 123 17 24 123 27 36 123 34 48	32 30 36 32 23 24 32 15 36 32 08 24 32 01 48		00 1 00 1	8 16.00 8 17.00 18 18.00 18 19.00 18 20.00	129 25 12 129 31 48 129 37 12 129 41 24 129 46 48	26 00 00 25 55 12 25 49 12 25 45 00 25 39 00
00 00 00 00	17 17 17 17 17	23.00 24.00 25.00 26.00 27.00	123 43 12 123 48 36 123 57 00 124 06 36 124 13 48	31 54 00 31 46 48 31 38 24 31 32 24 31 25 12		00 00	18 21.00 18 22.00 18 23.00 18 24.00 18 25.00	129 51 00 129 55 48 130 00 36 130 03 36 130 06 36	25 32 24 25 26 24 25 21 36 25 15 00 25 09 00
00 00 00 00	17 17 17	28 • 00 29 • 00 30 • 00 31 • 00 32 • 00	124 19 48 124 28 12 124 36 00 124 43 12 124 49 48	31 18 00 31 10 48 31 03 00 30 56 24 30 50 24		00 00	18 26.00 18 27.00 18 28.00 18 29.00 18 30.00	130 11 24 130 20 24 130 26 24 130 31 48 130 36 36	25 01 46 24 55 48 24 52 12 24 45 36 24 39 36
00 00 00	17 17 17	36.00	124 59 24 125 06 36 125 12 36 125 18 36 125 27 00	30 43 48 30 37 12 30 29 24 30 22 48 30 15 36		00 00	18 31.00 18 32.00 18 33.00 18 34.00 18 35.00	130 40 48 130 47 24 130 54 00 131 00 00 131 04 48	24 25 12 24 27 48
00 00 00	17 17 17	39.00 40.00 41.00	125 34 12 125 40 48 125 47 24 125 54 36 126 01 48	29 54 00 29 48 <b>0</b> 0		00	18 35.00 18 37.00 18 38.00 18 39.00 18 40.00	131 07 12 131 10 12 131 13 12 131 18 00 131 24 00	24 00 00 23 53 24 23 47 24
000	0 17	44.00 45.00 46.00	126 09 36 126 14 24 126 20 24 126 28 12 126 34 48	29 27 00 29 19 48 29 11 24		00 00 00 00	18 41.00 18 42.00 18 43.00 18 44.00 18 45.00	131 30 00 131 33 36 131 37 12 131 40 12 131 43 46	23 32 24 2 23 27 36 2 23 21 36
0	0 1	7 49.00 7 50.00 7 51.00	126 42 36 126 48 36 126 54 00 127 01 12 127 08 26	28 54 36 28 46 48 28 40 12		00 00 00	18 46.00 18 47.00 18 48.00 18 49.00 18 50.00	131 48 00 131 54 30 131 57 00 131 59 20 132 04 40	6 23 06 00 0 23 01 12 4 22 55 12
0		7 54.00	127 14 24 127 18 05 127 25 1 127 32 24 127 38 2	28 22 48 2 28 15 36 4 28 37 12		00 00 00 00	18 51.00 18 52.00 18 53.00 18 54.00 18 55.00	132 09 3 132 14 2 132 18 0 132 23 2 132 27 0	4 22 38 24 0 22 32 24 4 22 28 12
(	0 1	7 58.00 7 59.00 18 00.00	127 45 3 127 51 3 127 55 4	6 27 48 36		00	18 56.00 18 57.00		

PATRICK AFB	THECO. STA. 1.20	LAT. 28 31 29 N	LONG. 279 26 21 E	HT 0011 M
		20 MAY 58		

HR	MIN	SEC	AZIMUTH	ELEVATION	HR	MIN	SEC	AZIMUTH	ELEVATION
02 02	02 02	04.00 05.00 06.00 07.00	261 07 48 260 19 12 259 16 12 258 53 24	19 48 00 19 48 36	02 02	02 02	08.00 09.00 10.00 11.00	258 31 48 257 54 36 257 10 48 256 24 00	18 45 36 18 42 36

HR	MIN	SEC	AZIMUTH	ELEVATION		HR MI	N SEC	AZIMUTH	ELEVATION
02 02 02 02 02		12.00 13.00 14.00 15.00 16.00	256 00 36 255 58 12 255 51 00 255 36 00 255 40 12	18 59 24 19 05 24 19 05 24 19 06 00 19 06 00		02 03 02 03 02 03 02 03	23.00 24.00 25.00	243 09 36 243 00 00 242 51 00 242 39 00 242 26 24	19 47 24 19 47 24 19 47 24 19 46 48 19 46 48
02 02 02 02 02	02 02 02 02	17.00 18.00 19.00 20.00 21.00	255 43 48 255 28 48 255 06 36 254 46 12 254 17 24	19 05 24 18 57 00 19 10 12 19 10 48 19 10 48		02 0: 02 0: 02 0: 02 0: 02 0:	3 28.00 3 29.00 3 30.00	242 16 12 242 04 12 241 54 36 241 40 12 241 30 00	19 46 48 19 46 48 19 46 48 19 46 12 19 44 24
02 02 02 02 02	02 02 02 02 02	22.00 23.00 24.00 25.00 26.00	254 10 12 253 58 48 253 49 12 253 49 48 253 49 48	19 10 48 19 10 48 19 10 48 19 18 00 19 17 24		02 0 02 0 02 0 02 0	3 33.00 3 34.00	241 21 36 241 10 48 240 58 43 240 46 48 240 34 48	19 43 48 19 43 12 19 43 12 19 42 36 19 41 24
02 02 02 02 02	02 02 02 02 02	27.00 28.00 29.00 30.00 31.00	253 45 00 253 30 36 253 25 12 253 20 24 253 03 36	19 17 24 19 21 36 19 22 12 19 22 12 19 22 12		02 0 02 0 02 0	3 37.00 3 38.00 3 39.00 3 40.00 41.00	240 25 12 240 17 24 240 06 00 239 54 36 239 43 48	19 39 36 19 33 36 19 36 36 19 36 36 19 36 36
02 02 02 02 02	02 02 02 02	32.00 33.00 34.00 35.00 36.00	252 49 12 252 33 36 252 25 48 252 18 00 252 03 00	19 22 12 19 22 48 19 23 24 19 24 00 19 24 00		02 0	42.00 33 43.00 33 44.00 33 45.00 346.00	239 36 00 239 21 36 239 11 24 239 02 24 238 48 36	19 36 36 19 36 00 19 35 24 19 34 12 19 34 12
02 02 02 02	0 2 0 2	37.00 38.00 39.00 40.00 41.00	251 49 12 251 40 40 251 24 36 251 15 36 251 00 00	19 24 00 19 24 00 19 24 00 19 24 00 19 24 00		02 (	47.00 3 48.00 3 49.00 3 50.00 03 51.00	238 38 24 238 28 48 238 12 36 238 04 48 237 54 36	19 33 36 19 33 00 19 33 00 19 32 24 19 32 24
02 02 02 02	02 02 02		250 48 36 250 43 12 250 36 00 250 21 36 250 10 12	19 25 12 19 25 48 19 25 48 19 27 36 19 31 12		02 02 02	03 52.00 03 53.00 03 54.00 03 55.00 03 56.00	237 42 36 237 33 36 237 19 48 237 07 48 237 01 12	19 33 00 19 33 00 19 33 00 19 32 24 19 32 24
02 02 02 03	02	48.00 49.00 50.00	249 54 36 249 42 36 249 34 48 249 21 36 249 05 24	19 31 12 19 32 24 19 34 12 19 36 00 19 36 36		0 2 0 2 0 2	03 57.00 03 58.00 03 59.00 04 00.00 04 01.00	236 51 36 236 40 12 236 30 36 236 21 00 236 08 24	19 32 24 19 32 24 19 32 24 19 32 24 19 31 48
0: 0: 0: 0	2 02 2 02 2 02	53.00 54.00 55.00	248 52 12 248 40 48 248 30 00 248 18 00 248 09 00				04 02.00 04 03.00 04 04.00 04 05.00 04 06.00	236 01 12 235 53 24 235 40 48 235 31 48 235 19 48	19 31 12 19 30 36 19 30 00
0		2 58.00 2 59.00 3 00.00	247 55 48 247 43 12 247 34 48 247 22 12 247 11 24	19 49 48 19 48 00 19 46 12		02 02 02 02 02	04 07.00 04 08.00 04 09.00 04 10.00 04 11.00	235 08 24 235 00 36 234 51 00 234 38 24 234 27 00	19 27 36 19 25 12 19 23 24
0	12 0 12 0 12 0 12 0 12 0 12 0	3 03.00 3 04.00 3 05.00	247 03 36 246 50 24 246 36 00 246 25 12 246 14 24	19 46 12 19 46 12 19 46 12		02 02	04 12.00 04 13.00 04 14.00 04 15.00 04 16.00	234 18 00 234 05 24 233 56 24 233 46 48 233 37 48	19 19 48 19 18 00 19 16 12
(	02 0 02 0	3 07.00 3 08.00 3 09.00 3 10.00 3 11.00	246 04 12 245 55 12 245 41 24 245 29 24 245 16 12	19 46 48 4 19 46 48 4 19 46 48		02 02 02 02 02	04 17.00 04 18.00 04 19.00 04 20.00 04 21.00	233 27 00 233 18 36 233 08 24 232 56 24 232 46 48	5 19 12 00 4 19 12 00 4 19 12 36
	02 ( 02 (	12.00 13.00 13.00 13.00 13.00 15.00 16.00		8 19 46 48 8 19 46 48 6 19 46 48		02 02 02 02 02	04 22.00 04 23.00 04 24.00 04 25.00 04 26.00	232 05 2	2 19 06 36 0 19 04 12 4 19 01 12
	02 02 02	17.00 03 18.00 03 19.00 03 20.00 03 21.00	243 55 4 243 43 4 243 31 4	8 19 47 24 8 19 47 24 8 19 47 24		02 02 02 02 02		231 35 2 231 25 4 231 17 2	4 18 53 24 8 18 52 48 4 18 50 24

				20 MAY 58				
HR MIN	SEC	AZIMUTH	ELEVAT:ON		HR MIN	SEC	A2 I MUTH	ELEVATION
02 04 02 04 02 04 02 04 02 04	32.00 33.00 34.00 35.00 36.00	230 58 48 230 47 24 230 36 36 230 26 24 230 17 24	18 48 36 18 47 24 18 46 12 18 45 00 18 43 48		02 05 4 02 05 4 02 05 4	2.00 3.00 4.00 5.00 6.00	220 27 36 220 19 48 220 09 36	16 44 24 16 42 00 16 39 00 16 36 00 16 34 12
02 04 02 04 02 04 02 04 02 04	37.00 38.00 39.00 40.00 41.00	230 07 48 229 55 48 229 47 24 229 39 36 229 30 36	18 43 12 18 42 00 18 41 24 -18 40 48 18 40 12		02 05 4 02 05 4 02 05 5	7.00 8.00 9.00 0.00	219 54 00 219 45 36 219 39 00 219 31 48 219 24 36	16 31 12 16 28 12 16 24 36 16 23 24 16 20 24
02 04 02 04 02 04 02 04 02 04	42.00 43.00 44.00 45.00 46.00	229 20 24 229 10 48 229 00 00 228 51 00 228 39 36	18 39 00 18 38 24 18 37 12 7 18 36 36 18 34 12		02 05 5 02 05 5 02 05 5	52.00 53.00 54.00 55.00 56.00	219 12 36 219 04 12 218 55 12 218 47 24 218 41 24	16 18 00 16 14 24 16 12 36 16 10 48 16 09 36
02 04 02 04 02 04 02 04 02 04	49.00 50.00	228 28 48 228 18 36 228 10 48 228 04 48 227 56 24	18 32 24 18 32 24 18 31 48 18 29 24 18 25 12		02 05 02 05 02 06	57.00 58.00 59.00 00.00	218 31 48 218 22 48 218 13 48 218 06 00 217 58 48	16 06 36 16 04 48 16 02 24 16 00 00 15 58 48
02 04 02 04 02 04 02 04 02 04	53.00 54.00 55.00	227 46 12 227 37 12 227 27 36 227 18 00 227 09 36	18 22 12 18 19 48 18 16 48 18 14 24 18 12 36		02 06 02 06	02.00 03.00 04.00 05.00 06.00	217 51 00 217 42 00 217 38 24 217 35 24 217 29 24	15 57 36 15 56 24 15 55 12 15 53 24 15 51 00
02 04 02 04 02 05 02 05	58.00 59.00 00.00	227 04 12 226 52 12 226 40 48 226 30 00 226 18 36	18 12 00 18 09 36 18 07 12 18 07 12 18 06 00		02 06 02 06 02 06 02 06 02 08	07.00 08.00 09.00 10.00	217 19 12 217 12 00 217 06 00 216 55 48 216 49 12	15 48 36 15 46 48 15 45 00 15 42 36 15 39 00
02 05 02 05 02 05 02 05 02 05	03.00 04.00 5 05.00	226 09 36 226 04 12 225 58 12 225 55 12 225 39 36	18 04 48 18 03 36 18 01 48 18 00 36 17 58 12		02 06 02 06 02 06 02 06 02 06	12.00 13.00 14.00 15.00 16.00	216 40 48 216 36 00 216 32 24 216 28 48 216 22 12	15 36 00 15 34 12 15 33 00 15 28 48 15 25 12
02 0 02 0 02 0 02 0 02 0	5 08 • 00 5 09 • 00 5 10 • 00	225 28 48 225 19 48 225 11 24 225 04 12 224 57 36	17 57 00 17 55 48 17 54 36 17 52 48 17 52 48		02 06 02 06 02 06 02 06 02 06	17.00 18.00 19.00 20.00 21.00	216 10 48 216 02 24 215 52 48 215 47 24 215 41 24	15 21 36 15 20 24 15 17 24 15 17 24 15 15 00
02 0 02 0 02 0	5 12.00 5 13.00 5 14.00 5 15.00 5 16.00	224 51 00 224 36 00 224 27 36 224 19 48 224 09 36	17 52 12 17 49 12 17 48 00 17 47 24 17 43 48		02 06 02 06 02 06 02 06 02 06	22.00 23.00 24.00 25.00 26.00	215 37 48 215 31 12 215 25 48 215 18 00 215 10 12	15 15 00 15 12 00 15 11 24 15 09 00 15 05 24
02 0 02 0	17.00 15.18.00 15.19.00 15.20.00 15.20.00	224 03 00 223 51 36 223 42 36 223 34 12 223 25 48	17 39 36 17 37 12 17 33 36 17 29 24 17 27 00		02 06 02 06 02 06 02 06 02 06	27.00 28.00 29.00 30.00 31.00	215 04 12 214 56 24 214 50 24 214 45 36 214 40 12	15 01 48 15 00 36 14 56 24 14 52 48 14 52 12
02 02 02	05 22.00 05 23.00 05 24.00 05 25.00 05 26.00	223 18 00 223 10 48 223 03 36 222 54 36 222 46 12	17 22 12 17 21 00 17 20 24		02 06 02 06 02 06 02 06 02 06	32.00 33.00 34.00 35.00 36.00	214 34 12 214 28 12 214 23 24 214 16 12 214 07 12	14 48 00 14 46 12 14 43 48
02 02 02	05 27.00 05 28.00 05 29.00 05 30.00 05 31.00	222 37 48 222 28 48 222 21 36 222 13 12 272 04 12	17 12 36 17 10 48 17 09 36		02 06 02 06 02 06 02 06 02 06	38 • 00 39 • 00 40 • 00	214 01 12 213 56 24 213 52 12 213 46 48 213 40 48	14 34 48 14 32 24 14 28 48
02 02 02	05 32.00 05 33.00 05 34.00 05 35.00 05 36.00	221 50 24 221 44 24 221 33 00	17 03 00 17 00 00 16 55 12		02 06 02 06 02 06 02 06 02 06	43.00 44.00 45.00	213 36 36 213 30 36 213 26 24 213 20 24 213 13 12	14 22 48 14 20 24 14 19 12
	05 37.00 05 38.00 05 39.00 05 40.00 05 41.00	221 04 1 220 57 0 223 51 0	2 16 49 48 0 16 48 00 0 16 47 24		02 06 02 06 02 06 02 06 02 06	48.00 49.00 50.00	213 12 00 212 59 24 212 51 36 212 42 36 212 36 00	4 14 12 36 5 14 11 24 6 14 09 00

PATRICK AFB	THE00. STA. 1.20	LAT. 28 31 29 N	LONG. 279 26 21 E	HT 0011 M
		20 MAY 58		

HR	MIN	SEC	A2 IMUTH	ELEVATION	HR	MIN	SEC	AZIMUTH	ELEVAT ION
02 02 02	06 06 05 06	52.00 53.00 54.00 55.00	212 31 12 212 26 24 212 18 00 212 07 48	14 07 12 14 07 12 14 06 36 14 06 36	02 02 02 02	07 07 07	10.00 11.00 12.00 13.00	211 10 12 211 10 12 211 10 12 211 10 12	14 01 48 14 01 48 14 00 00 -14 00 00
02	06	56 • 00	212 01 48	14 06 36	02	07	14.00	211 07 48	13 58 48
02 02 02 02 02	06 06 06 07 07	57.00 58.00 59.00 00.00 01.00	211 56 24 211 48 00 211 40 12 211 36 00 211 32 24	14 06 36 14 06 36 14 06 00 14 05 24 14 05 24	02 02 02 02 02	07 07 07 07	15.00 16.00 17.00 18.00 19.00	211 05 24 210 57 36 210 51 00 210 44 24 210 38 24	13 57 36 13 56 24 13 54 36 13 52 48 13 51 36
02 02 02 02 02	07 07 07 07 07	02.00 03.00 04.00 05.00 06.00	211 30 00 211 27 00 211 24 36 211 19 48 211 17 24	14 05 24 14 05 24 14 06 00 14 06 00 14 06 00	02 02 02 02 02	07 07 07 07	20.00 21.00 22.00 23.00 24.00	210 31 48 210 27 36 210 24 00 210 18 36 210 13 48	13 48 36 13 46 48 13 45 00 13 39 36 13 38 24
02 02 02	07 07 07	07.00 08.00 09.00	211 16 12 211 16 12 211 10 48	14 06 00 14 05 24 14 02 24	0 2 0 2 0 2	07	25.00 26.00 27.00	210 09 36 210 00 36 209 51 36	13 34 48 13 33 00 13 31 12

PATRICK AFB THEOD. STA. 1.50 LAT. 28 24 29 N LONG. 279 24 09 E HT 0012 M

20 MAY 58

					20 MAY	28									
HR	MIN	SEC	A2 IMUTH	ELEVATION			HR	MIN	SEC	AZIM	UTH		ELE	/AT	NO
02	01	53.00	262 37 48	18 41 24			02	02	38.00	253 5	9 2	4	19		
02	01	54.00	262 26 24	18 43 12			02	02	39.00	253 4			19		
02	01	55.00	262 16 12	18 44 24			02	02	40.00	253 3			19		
02	01	56.00	262 06 00	18 46 48			02	02	41.00	253 1			19		
02	01	57.00	261 59 24	18 46 48			02	02	42.00	253 0			19		
-	••							-			_				
02	01	58.00	261 49 48	18 46 48			02	02	43.00	252 5	7 3	6	19	52	12
02	01	59 • 00	261 30 36	18 52 12			02	02	44.00	252 5			19	53	24
02	G2	00.00	261 13 12	18 54 00			02	02	45.00	252 3			19		
02		01.00	261 03 36	18 56 24			02	02	46.00	252 2			19		
02	02	02.00	260 55 48	18 57 36			02	02	47.00	252 1	12 0	O G	19	54	00
02	02	03.00	260 45 36	19 00 36			02	02	48.00	251 5	59 2	24	19	55	12
02		04.00	260 37 48	19 03 00			02	02	49.00	251 4	+6 4	-8	19		
02		05.00	260 24 00	19 04 48			02	02	50.00	251 3	36 3	36	19	57	00
02		06.00	260 09 36	19 01 12			02	32	51.00 .	251 2	23 2	24	19	57	00
02	02	07.00	260 00 36	19 04 48			02	02	52.00	251	14 :	24	19	57	36
02	02	08.00	259 46 12	19 09 36			02	02	53.00	251	02 (	0.0	10	58	12
02		09.00	259 33 36	19 11 24			02	02	54.00	250				59	
02		10.00	259 25 48	19 12 00			02	02	55.00	250				ço.	
02		11.00	259 13 12	19 14 24			02	02	56.00	250	25	12	20	01	12
02	02	12.00	259 03 00	19 17 24			02	02	57.00	250	12 (	00	20	01	12
02	02	13.00	258 57 36	19 19 12			02	02	58.00	250	02	24	20	01	12
02	02	14.00	258 47 24	19 21 36			02	02	59.00	249			20	01	48
02		15.00	258 27 00	19 20 24			02	03	00.00	249				02	
02		16.00	258 13 48	19 20 24			02	03	01.00	249				03	
0;	2 02	17.00	258 01 48	19 22 48			02	03	02.00	249	16	48	20	03	36
0:	2 02	18.00	257 49 12	19 23 24			02	03	03.00	249	04	12	20	04	12
0	2 02	19.00	257 37 12	19 25 12			02	03	04.00	248	54	36	20	04	12
0;			257 28 12	19 26 24			02		05.00	248	40	48		C#	
0			257 15 00	19 27 36			02		06.00	248				04	
0	2 02	22.00	. 257 04 48	19 28 12			02	03	07.00	248	15	00	20	05	24
0	2 02	23.00	256 50 24	19 29 24			02	03	08.00	248	04	12	20	06	36
0	2 02	24.00	256 40 48	19 31 12			02	03	09.00	247	55	12	20	0.5	36
	2 02		256 28 12	19 31 48			02			. 247				06	
	2 02		256 16 12	19 33 00			02			247				07	
0	2 02	27.00	256 04 12	19 33 36			02	03	12.00	247	21	36	20	08	24
0	2 02	29.00	255 29 24	19 36 36			02	03	13.00	247	10	48	20	07	48
0	2 02	30.00	255 21 00	19 37 48			02	03	14.00	247	00	36	20	07	12
	2 02	2 21.00	255 07 12				02		15.00	246	50	24	20	07	12
	2 0		254 53 24				02			246				07	
C	2 0	2 33.00	254 46 12	19 42 00	•		02	03	17.00	. 246	24	00	20	07	48
	2 0	2 34.00	254 38 24	19 43 12			02	03	18.00	246	14	24	20	07	48
	2 0		254 30 00				02			246					24
	02 0	2 36.00	254 19 12				02	03		245	48	36			24
(	02 0	2 37.00	254 12 00	19 46 12			02	0 2	21.00	245	39	00			24

					20 ,441 50				
HR	MIN	SEC	AZ IMUTH	ELEVATION			MIN SEC	AZIMUTH	ELEVATION
02 02 02 02 02	03 03 03 03	22.00 23.00 24.00 25.00 26.00	245 27 36 245 15 36 245 07 48 244 54 36 244 42 00	20 08 24 20 08 24 20 08 24 19 56 24 20 09 00		02 02 02 02 02	04 32.00 04 33.00 04 34.00 04 35.00 04 36.00	232 58 48 232 48 36 232 37 48 232 26 24 232 16 12	19 25 12 19 24 00 19 22 12 19 21 00 19 19 12
02 02 02 02 02	03 03 03 03	27.00 28.00 29.00 30.00 31.00	244 32 24 244 20 24 244 07 48 243 56 24 243 45 36	20 09 00 20 09 00 20 09 00 20 09 00 20 09 00		02 02 02 02 02	04 37.00 04 38.00 04 39.00 04 40.00 04 41.00	232 06 00 231 56 24 231 46 12 231 36 36 231 26 24	19 17 24 19 16 48 19 15 36 19 13 12 19 12 36
02 02 02 02 02	03 03 03 03	32.00 33.00 34.00 35.00 36.00	243 34 12 243 21 36 243 11 24 243 02 24 242 51 36	20 09 00 20 08 24 20 08 24 20 07 48 20 07 48		02 02 02 02 02	04 42.00 04 43.00 04 44.00 04 45.00 04 46.00	231 15 00 231 07 48 230 58 12 230 48 36 230 40 48	19 11 24 19 08 24 19 07 48 19 06 00 19 05 24
02 02 02 02 02	03 03 03 03	37.00 38.00 39.00 40.00 41.00	242 40 48 242 30 35 242 18 36 242 05 24 241 53 24	20 06 36 20 06 36 20 06 36 20 06 36 20 06 00		02 02 02 02	04 47.00 04 48.00 04 49.00 04 50.00 04 51.00	230 33 36 230 22 12 230 12 36 229 58 48 229 49 12	19 03 36 19 02 24 19 01 12 18 59 24 18 58 12
02 02 02 02 02	03 03 03 03	42.00 43.00 44.00 45.00 46.00	241 41 24 241 30 36 241 21 36 241 13 12 241 02 24	20 06 00 20 05 24 20 04 48 20 04 48 20 04 48		02 02 02 02 02	04 52.00 04 53.00 04 54.00 04 55.00 04 56.00	229 41 24 229 32 24 229 21 36 229 12 36 229 04 12	18 57 00 18 55 12 18 53 24 18 51 36 18 49 48
02 02 02 02 02	03 03 03 03 03	47.00 48.00 49.00 50.00 51.00	240 51 00 240 39 00 240 25 48 240 16 12 240 07 48	20 04 12 20 03 00 20 03 00 20 02 24 20 01 48		02 02 02 02 02	04 57.00 04 58.00 04 59.00 05 00.00 05 Cl.00	228 55 48 228 45 36 228 35 24 228 25 48 228 15 36	18 48 00 18 45 48 18 45 36 18 43 48 18 42 36
02 02 02 02 02	03 03 03 03	52.00 53.00 54.00 55.00 56.00	239 54 00 239 43 12 239 33 36 239 24 00 239 13 48	20 01 12 20 00 36 20 00 00 20 00 00 19 58 48		02 02 02 02	05 02.00 05 03.00 05 04.00 05 05.00 05 06.00	228 06 00 227 58 48 227 50 24 227 40 12 227 28 12	18 41 24 18 40 12 13 38 24 18 36 00 18 34 48
02 02 02 02 02	03 03 03 04 04	57.00 58.00 59.00 00.00 01.00	239 00 36 238 50 24 238 40 48 238 30 36 238 19 12	19 57 36 19 57 36 19 57 00 19 55 48 19 55 12		02 02 02 02 02	05 07.00 05 08.00 05 09.00 05 10.00 05 11.00	227 20 24 227 10 48 227 03 00 226 57 00 226 46 48	18 33 36 18 31 48 18 30 36 18 27 00 18 25 12
02 02 02 02 02	04 04 04	02.00 03.00 04.00 05.00 06.00	238 07 48 237 55 49 237 45 36 237 33 36 237 24 36	19 54 00 19 53 24 19 52 48 19 52 12 19 51 00		02 02 02 02 02	05 14.00	226 36 00 226 25 48 226 15 36 226 07 12 225 <b>5</b> 6 48	18 24 26 18 23 24 18 21 36 18 19 12 18 18 60
02 02 02 02 02	04 04	07.00 08.00 09.00 10.00 11.00	237 13 12 237 03 36 236 53 24 236 42 00 236 30 00	19 50 24 19 49 48 19 49 48 19 49 48 19 49 12		02 02 02 02	05 18.00 05 19.00 05 20.00	225 51 36 225 39 36 225 31 12 225 22 12 225 13 12	18 16 12 18 14 24 18 13 12 18 11 24 18 08 24
02 02 02 02	04 04	12.00 13.00 14.00 15.00 16.00	236 20 24 236 12 36 236 00 00 235 52 12 235 41 24	19 48 36 19 45 36 19 44 24 19 43 48 19 43 12		02 02 02 02	05 23.00 05 24.00 05 25.00	225 04 48 224 57 00 224 49 12 224 41 24 224 31 12	18 06 36
02 02 02 02 02	04	17.00 18.00 19.00 20.00 21.00	235 29 24 235 19 12 235 08 24 234 58 12 234 48 00	19 42 00 19 40 48 19 39 00 19 37 48 19 37 12		02 02 02 02	05 28.00 05 29.00 05 30.00	224 21 36 224 15 36 224 06 00 223 57 00 223 48 00	17 58 12 17 55 12 17 51 36 17 50 24
02 02 02 02	04	25.00	234 37 48 234 27 36 234 18 00 234 07 12 233 56 24	19 36 00 19 35 24 19 34 12 19 33 36 19 31 48		02 02 02 02	05 33.00 05 34.00 05 35.00	223 39 36 223 29 24 223 23 24 223 13 12 223 05 24	17 47 24 17 45 36 17 43 48 17 42 36
02	2 04 2 04 2 04 2 04 2 04	28.00 29.00 30.00	233 46 48 233 33 36 233 22 12 233 15 36 233 07 48	19 30 36 19 28 48 19 28 48 19 26 24 19 25 48		02 02 02 02	05 38.00 05 39.00 05 40.00	222 58 12 222 50 24 222 41 24 222 32 24	17 38 24 17 36 00 17 34 12 17 33 00

PATRICK AFB THEOO. STA. 1.50 LAT. 28 24 29 N LONG. 279 24 09 E HT 0012 M

HR	MIN	SEC	AZIMUTH	ELEVATION	HR	MIN	SEC	AZIMUTH	ELEVATION
02 02 02 02 02	05 05 05 05	42.00 43.00 44.00 45.00 46.00	222 14 24 222 06 36 222 00 00 221 51 36 221 44 24	17 27 36 17 25 48 17 24 36 17 22 12 17 19 48	02 02 02	06 3 06 3 06 3	5.00 6.00 37.00 38.00	215 30 00 215 23 24 215 18 00 215 08 24 214 59 24	15 31 48 15 29 24 15 26 24 15 24 00 15 21 36
02 02 02 02 02	05 05 05 05	47.00 48.00 49.00 50.00 51.60	221 34 12 221 25 12 221 16 48 221 08 24 221 00 00	17 18 00 17 16 12 17 13 48 17 12 00 17 09 36	02	06 4 06	40.00 41.00 42.00 43.00	214 53 24 214 46 12 214 42 00 214 33 00 214 26 24	15 19 48 15 18 00 15 16 12 15 13 12 15 12 00
02 02 02 02 02	05 05 05 05	52.00 53.00 54.00 55.00 56.00	220 52 12 220 43 48 220 36 36 220 28 12 220 21 00	17 08 24 17 06 00 17 03 00 17 01 12 16 59 24	02 02 02 02 02	06 06	45.00 46.00 47.00 48.00 49.00	214 20 24 214 15 00 214 04 48 213 58 48 213 52 48	15 10 12 15 08 24 15 06 36 15 02 24 15 00 00
02 02 02 02 02	05 05 05 06 06	57.00 58.00 59.00 00.00 01.00	220 13 48 220 05 24 219 57 36 219 49 48 219 42 00	16 57 36 16 54 36 16 53 24 16 51 36 16 48 00	02 02 02 02 02	06 06	50.00 51.00 52.00 53.00 54.00	213 45 36 213 37 12 213 29 24 213 23 24 213 17 24	14 57 00 14 54 36 14 51 36 14 47 24 14 45 36
02 02 02 02 02	06 06 06 06	02 • 00 03 • 00 04 • 00 05 • 00 06 • 00	219 33 00 219 24 36 219 19 48 219 11 24 219 03 00	16 45 00 16 44 24 16 42 00 16 39 00 16 37 12	02 02 02 02 02	06 06 06 06	55.00 56.00 57.00 58.00 59.00	213 11 24 213 04 48 212 59 24 212 52 12 212 46 48	14 42 36 14 42 00 14 40 12 14 37 48 14 35 24
02 02 02 02 02		07.00 08.00 09.00 10.00	218 57 36 218 49 12 218 42 00 218 34 12 218 25 48	16 35 24 16 33 36 16 31 48 16 29 24 16 27 36	02 02 02 02 02	07 07 07 07	00.00 01.00 02.00 03.00 04.00	212 42 00 212 34 12 212 25 48 212 18 36 212 13 12	14 33 36 14 31 12 14 28 48 14 27 00 14 24 36
02 02 02 02 02	06 06	15.00	218 18 00 218 09 00 217 58 48 217 50 24 217 45 36	16 25 48 16 22 48 16 21 36 16 19 12 16 16 12	02 02 02 02 02	07 07 07 07 07	05.00 06.00 07.00 08.00 09.00	212 07 12 212 01 12 211 55 12 211 49 12 211 43 48	14 22 12 14 19 48 14 17 24 14 15 36 14 13 48
02 02 02 02	06	18.00 19.00 20.00	217 39 00 217 32 24 217 25 48 217 16 48 217 10 48	16 13 48 16 11 24 16 09 00 16 06 36 16 05 24	02 02 02 02 02	07 07 07	10.00 11.00 12.00 13.00 14.00	211 36 36 211 28 12 211 23 24 211 18 00 211 10 12	14 09 36 14 07 48 14 04 48 14 03 00 14 01 48
0:00	2 06	23.00 5 24.00 5 25.00	217 03 36 216 56 24 216 45 36 216 40 12 216 33 36	15 57 36 15 55 12	02 02 02 02 02	07 07 07	15.00 16.00 17.00 18.00 19.00	211 02 24 210 54 36 210 47 24 210 42 36 210 34 48	13 57 00 13 54 36 13 52 12
0 0 0	2 0	6 28 • 00 6 29 • 00 6 30 • 00	216 26 24 216 20 24 216 13 48 216 04 12 215 57 36	15 49 12 15 48 00 15 45 36	<b>0</b> 2 0 2 0 2 0 2	07	20.00 21.00 22.00 23.00 24.00	210 28 12 210 23 24 210 15 36 210 09 00 210 01 48	13 42 00 13 37 12 13 34 43
0	2 0	6 33 • 00	215 57 00 215 42 36 215 36 00	15 37 12	02 02	07	25.00 26.00 27.00	209 57 36 209 57 36 209 57 36	13 25 12

PATRICK AFB 7HEOD. STA. 1.40 LA7. 28 27 58 N LONG. 279 24 38 E H7 0010 M 20 MAY 58 AZIMUTH HR MIN SEC AZIMUTH HR MIN SEC **ELEVATION ELEVATION** 252 24 00 252 17 24 252 07 48 251 56 24 251 47 24 19 39 36 19 37 48 19 45 00 19 53 24 19 54 36 250 56 24 250 43 12 250 28 12 250 16 48 250 03 00 19 54 36 19 57 36 19 57 36 19 58 48 19 58 48 44.00 02 02 53.00 02 02 54.00 02 02 55.00 02 02 56.00 02 02 57.00 02 02 45 a 00 02 02 46 a 00 02 02 47 a 00 02 02 47 a 00 02 02 48 a 00 02 02 49.00 02 02 50.00 02 02 51.00 02 02 52.00 251 40 12 251 27 36 251 18 36 251 07 48 19 57 36 19 55 48 19 55 12 19 54 36 02 02 58.00 02 02 59.00 02 03 00.00 02 03 01.00 249 50 24 249 42 00 249 33 00 249 19 48 19 58 48 20 00 00 20 00 00 20 01 48

				20 MAY 58				
HR MI	N SEC	AZIMUTH	ELEVATION	•	HR MIN	SEC	AZIMUTH	ELEVATION
02 03 02 03 02 03 02 03 02 03	03.00 04.00 05.00	249 06 00 248 54 00 248 44 24 248 32 24 248 21 00	20 01 48 20 01 48 20 03 36 20 02 24 20 02 24		02 04 02 04 02 04 02 04 02 04	12.00 13.00 14.00 15.00	236 11 24 236 01 48 235 51 00 235 42 00 233 29 24	19 43 12 19 42 00 19 41 24 19 40 12 19 39 36
02 03 02 03 02 03 02 03 02 03	08.00 09.00 10.00	248 09 36 247 54 36 247 46 12 247 37 48 247 25 12	20 02 24 20 02 24 20 04 12 20 04 12 20 04 48		02 04 02 04 02 04 02 04 02 04	17.00 18.00 19.00 20.00 21.00	235 18 00 235 07 48 235 00 00 234 49 48 234 37 12	19 39 36 19 39 00 19 36 00 19 35 24 19 34 12
02 03 02 03 02 03 02 03	13.00 3.14.00 15.00	247 19 12 246 58 48 246 48 00 246 36 00 246 24 36	20 04 48 20 06 00 20 05 24 20 05 24 20 05 24		02 04 02 04 02 04 02 04 02 04	25.00	234 28 48 234 19 48 234 08 24 233 57 36 233 48 00	19 32 24 19 31 12 19 30 36 19 29 24 19 28 12
02 01 02 01 02 01 02 01 02 01	18.00 19.00 3 20.00	246 14 24 246 03 36 245 51 00 245 41 24 245 29 24	20 05 24 20 06 00 20 06 00 20 06 00 20 06 36		02 04 02 04 02 04 02 04 02 04	28.00 29.00 30.00	233 39 36 233 31 12 233 19 12 233 07 12 232 58 12	19 27 36 19 25 48 19 25 12 19 23 24 19 21 36
02 0 02 0 02 0 02 0 02 0	3 23.00 3 24.00 3 25.00	245 18 36 245 06 00 244 52 48 244 44 24 244 34 48	20 06 36 20 06 36 20 06 36 20 06 36 20 06 36		02 04 07 04 02 04 02 04 02 04	33.00 34.00 35.00	232 48 00 232 36 00 232 26 24 232 14 24 232 03 00	19 20 24 19 19 48 19 19 12 19 18 00 19 16 48
02 0 02 0 02 0 02 0 02 0	3 28.00 3 29.00 3 30.00	244 22 12 244 11 24 243 57 36 243 47 24 243 37 48	20 06 36 20 06 36 20 07 12 20 07 12 20 07 12		02 04 02 04 02 04 02 04	38.00 39.00 4 40.00	231 49 48 231 43 48 231 33 00 231 27 00 231 19 48	19 15 36 19 14 24 19 13 48 19 13 12 19 10 12
02 0 02 0	3 32.00 3 33.00 3 34.00 3 35.00 3 36.00	243 26 24 243 16 12 243 00 00 242 54 36 242 39 00	20 09 36 20 05 24 20 05 24 20 05 24 20 04 48		02 0 02 0 02 0 02 0 02 0	4 43.00 4 44.00 4 45.00	231 11 24 231 00 00 230 51 00 230 40 12 230 30 36	19 09 00 19 08 24 19 06 00 19 04 48 19 04 12
02 02 02	37.00 33.38.00 33.39.00 33.40.00 33.40.00	242 29 24 242 20 24 242 10 12 241 57 00 241 46 12	20 04 48 20 03 36 20 03 36 20 03 36 20 03 36			4 48.00	230 21 00 230 09 36 229 56 24 229 50 24 229 44 24	19 02 24 19 01 48 19 00 36 18 58 12 18 55 48
02 02 02	03 42.00 03 43.00 03 44.00 03 45.00 03 46.00	241 34 48 241 24 36 241 15 00 241 03 36 240 53 24	20 03 00 20 02 24 20 01 48 20 00 36 20 00 00		02 0 02 0 02 0	52.00 4 53.00 4 54.00 4 55.00 4 56.00	229 33 36 229 24 00 229 16 48 229 08 24 228 55 48	18 55 48 18 53 24 18 52 48 18 50 24 18 49 48
G 2 02	03 47.00 03 48.00 03 49.00 03 50.00 03 51.00	240 42 36 240 29 24 240 18 00 240 04 48 239 55 48	19 58 48		02 0	04 57.00 04 58.00 04 59.00 05 00.00 05 01.00	228 47 24 228 38 24 220 28 48 228 18 36 228 06 36	18 45 36 18 43 48 18 42 36
	03 52.00 03 53.00 03 54.00 03 55.00 03 56.00	239-46 12 239 37 48 239 25 48 239 13 12 239 03 00	19 58 48 19 58 12 19 59 24		02		227 55 12 227 46 12 227 36 00 227 26 24 227 17 24	18 37 12 18 35 24 18 34 48
02 02 02 02 02	03 57.00 03 58.00 03 59.00 04 00.00 04 01.00	238 29 24 238 18 36	19 43 48 19 54 00 19 54 00		02 02 02	05 07.00 05 08.00 05 09.00 05 10.00 05 11.00	227 09 36 226 57 36 226 52 12 226 45 36 226 39 36	18 28 12 18 25 48 18 24 36
02 02 02 02 02	04 02.00 04 03.00 04 04.00 04 05.00 04 06.00	237 46 13 237 36 36 237 25 4	2 19 51 00 5 19 49 48 8 19 49 48		02	05 12.00 05 13.00 05 15.00 05 16.00 05 17.00	225 58 44 225 51 0	2 18 18 00 2 18 16 12 0 18 13 48
02 02 02 02 02	04 07.00 04 08.00 04 09.00 04 10.00 04 11.00	236 55 4 236 44 2 236 34 1	8 19 46 48 4 19 46 12 2 19 45 00		02 02 02 02 02	05 18.00 05 19.00 05 20.00 05 21.00 05 22.00	225 27 0 225 17 2 225 07 1	0 18 09 36 4 18 08 24 2 18 06 00

						20 HAY	58					
н	R I	MIN	SEC	AZ 1MUTH	ELEVATION			HR	MIN	SEC	AZIMUTH -	ELEVATION
0:	2 1	05 05 0 <b>5</b>	23.00 24.00 25.00 26.00 27.00	224 49 12 224 40 48 224 31 48 224 18 00 224 12 00	18 01 48 17 59 24 17 58 48 17 57 00 17 54 36			02 02 02	06 2 06 2 06 2	6.00 7.00 28.00 29.00	216 30 00 216 23 24 216 17 24 216 10 48 216 04 12	15 49 48 15 46 12 15 43 12 15 42 00 15 40 48
0	2 2 2	05 05	28.00 29.00 30.00 31.00 32.00	224 07 12 224 00 00 223 49 48 223 42 36 223 34 12	17 54 00 17 51 36 17 48 00 17 45 36 17 42 36			02	06 06	31.00 32.00 33.00 34.00 35.00	215 55 48 215 45 36 215 39 00 215 31 12 215 23 24	15 39 36 15 37 12 15 34 12 15 31 12 15 29 24
0	2 2 2	05 05 05 05	33.00 34.00 35.00 36.00 38.00	223 26 24 223 19 12 223 10 12 223 03 00 222 42 00	17 41 24 17 40 48 17 39 00 17 37 48 17 33 00			02 02 02 02 02	06 06 06	36.00 37.00 38.00 39.00 40.00	215 19 12 215 13 12 215 04 48 214 54 00 214 48 36	15 28 12 15 25 12 15 22 48 15 19 48 15 17 24
0		05 05 05 05	39.00 40.00 41.00 42.00 43.00	222 34 48 222 25 48 222 18 36 222 05 24 221 58 48	17 31 12 17 28 48 17 27 00 17 25 12 17 23 24			02 02 02 02 02	06	41.00 42.00 43.00 44.00 45.00	214 39 00 214 28 12 214 23 24 214 14 24 214 03 36	15 15 36 15 13 12 15 10 48 15 07 12 15 04 48
0	02	05 05 05 05	44.00 45.00 46.00 47.00 48.00	221 51 36 221 45 36 221 37 48 221 30 00 221 23 24	17 21 00 17 18 36 17 17 24 17 15 36 17 13 12			02 02 02 02 02	06 06 06 06	46.00 47.00 48.00 49.00 50.00	213 53 24 213 48 36 213 47 24 213 45 00 213 38 24	15 03 36 15 03 00 15 00 36 14 56 24 14 54 00
1	02 02 02 02	05 05 05 05 05	49.00 50.00 51.00 52.00 53.00	221 14 24 221 04 12 220 55 12 220 47 24 220 39 00	17 12 00 17 10 48 17 07 48 17 05 24 17 02 24			02 02 02 02 02	06 06 06 06	51.00 52.00 53.00 54.00 55.00	213 30 00 213 21 36 213 15 36 213 10 12 213 09 00	14 53 24 14 52 48 14 52 12 14 51 36 14 46 12
	02 02 02 02 02	05 05 05 05	54 c 0 0 55 c 0 0 56 c 0 0 57 c 0 0 58 c 0 0	220 30 36 220 25 48 220 18 36 220 12 00 220 02 24	17 00 36 16 59 24 16 56 24 16 55 12 16 52 48			02 02 02 02 02	06 06 06 06	56.00 57.00 58.00 59.00 00.00	213 04 12 212 57 36 212 51 36 212 45 36 212 39 36	14 40 48 14 37 48 14 34 48 14 33 36 14 31 48
	02 02 02 02 02		59.00 00.00 01.00 02.00 03.00	219 51 00 219 43 12 219 35 24 219 29 24 219 20 24	16 50 24 16 48 36 16 45 36 16 43 48 16 42 00			02 02 02 02 02	07 07	01.00 02.00 03.00 04.00 05.00	212 34 48 212 28 12 212 22 12 212 13 12 212 06 00	14 29 24 14 26 24 14 23 24 14 20 24 14 18 00
	02 02 02 02	06 06 06 06	05.00 06.00 07.00	219 12 00 219 07 12 218 58 48 218 53 24 218 44 24	16 37 48 16 35 24 16 34 48			02 02 02 02	07 07 07	06.00 07.00 08.00 09.00 10.00	212 00 36 211 53 24 211 48 36 211 42 36 211 35 24	14 16 12 14 14 24 14 13 12 14 10 48 14 07 48
	02 02 02 02	06 06	10.00 11.00 12.00	218 36 36 218 28 12 218 22 12 218 14 24 218 08 24	16 25 48 16 24 00 16 23 24			02 02 02 02	07 07 07	11.00 12.00 13.00 14.00 15.00	211 28 48 211 22 48 211 15 00 211 07 48 211 02 24	14 04 12 14 00 36 13 57 36 13 55 12 13 52 12
	02 02 02 02	06	15.00 16.00 17.00	218 00 36 217 53 26 217 44 26 217 34 46 217 26 26	16 15 36 16 13 12 8 16 10 12			02	2 07 2 07 2 07	19.00	210 57 00 210 52 48 210 46 48 210 38 24 210 31 12	13 49 48 13 45 00 13 40 48 13 39 36 13 41 24
	02	2 0	6 20.00 6 21.00 6 22.00	217 20 2 217 12 0 217 04 4 216 57 3 216 50 2	0 16 04 12 8 16 02 24 6 16 01 48			0:	2 07 2 07 2 07	23.00 24.00 25.00	210 24 36 -210 09 00 209 59 24 209 52 12 209 46 12	13 31 48 13 30 36
		2 . 0	6 24.00 6 25.00	216 43 1 216 36 3				0	2 07	27.00	209 43 40	13 25 48

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	<u>.</u>		W 15		20 MAY 58		У		ASIL		
HR	MIN	SEC	AZIMUTH	ELEVATION			HR I	MIN	SEC	AZ1MUTH	ELEVATION
03 03 03 03 03	48	02.00 03.00 04.00 05.00 06.00	208 34 48 208 20 06 208 11 06 208 00 14 207 49 12	27 32 27 27 28 12 27 23 20 27 16 48 27 14 56			03 03 03	49 49 49	12.00 13.00 14.00 15.00 16.00	197 47 16 197 39 43 197 33 03 197 26 24 197 18 36	22 17 24 22 12 54 22 09 10 22 05 49 22 00 36
03 03 03 03 03	48 48 48	07.00 08.00 05.00 10.00	207 33 36 207 24 32 207 14 02 207 04 12 206 54 36	27 09 03 27 04 44 26 59 24 26 56 31 26 50 02			03 03	49 49 49	17.00 18.00 19.00 20.00 21.00	197 10 08 197 01 51 196 56 27 196 50 16 196 44 02	21 56 24 21 51 03 21 46 08 21 42 00 21 38 42
03 03 03 03 03	48 48 48 48	12.00 13.00 14.00 15.00 16.00	206 45 00 206 29 42 206 19 30 206 10 48 206 00 54	26 46 04 26 44 06 26 38 20 26 33 10 26 29 20	7.37		03 03 03 03	49 49 49	22.00 23.00 24.00 25.00 26.00	196 35 16 196 28 40 196 20 24 196 12 25 196 07 12	21 34 58 21 30 28 21 24 54 21 20 34 21 16 22
03 03 03 03	48 48 48 48	17.00 18.00 19.00 20.00 21.00	205 52 51 205 39 36 205 29 38 205 21 36 205 12 00	26 24 25 26 19 12 26 15 54 26 11 52 26 07 01			03	49 49 49 49	27.00 28.00 29.00 30.00 31.00	195 59 56 195 52 55 195 46 37 195 40 30 195 33 00	21 10 51 21 06 00 21 03 36 21 00 32 20 55 12
03 03 03 03	48 48 48	24 • 00 25 • 00	205 01 12 204 50 56 204 40 48 204 25 26 204 21 07	26 02 56 25 55 48 25 51 36 25 48 36 25 43 44				49 49 49 49	32.00 33.00 34.00 35.00 36.00	195 25 51 195 21 14 195 14 06 195 04 40 194 58 22	20 51 28 20 45 39 20 42 54 20 38 34 20 34 12
03 03 03 03	48 48 48	28 • 00	204 12 36 204 01 51 203 53 24 203 43 48 203 32 16	25 38 24 25 34 12 25 30 32 25 24 00 25 20 24			03 03 03 03		37.00 38.00 39.00 40.00 41.00	194 54 03 194 49 04 194 44 20 194 33 28 194 25 30	20 29 24 20 26 13 20 22 48 20 17 24 20 12 32
03 03 03 03	48 48 48		203 18 00 203 14 24 203 05 02 202 55 44 202 49 12	25 17 09 25 12 54 25 06 54 25 02 13 24 58 48			03 03	49 49	42.00 43.00 44.00 45.00 46.00	194 22 12 194 15 00 194 10 12 194 01 26 193 55 58	20 08 56 . 20 04 44 20 00 50 19 57 36 19 52 15
03 03 03 03	3 48 3 48 3 48	38.00 39.00 40.00	202 39 54 202 27 36 202 18 18 202 09 10 202 00 28	24 52 58 24 49 55 24 44 27 24 40 48 24 34 44			03 03 03 03	49	47:00 48:00 49:00 50:00 51:00	193 50 13 193 44 24 193 37 33 193 31 12 193 24 39	19 48 00 19 43 26 19 39 10 19 34 58 19 31 08
0	3 48 3 48 3 48 3 48 3 48	43.00 44.00 45.00	201 52 48 201 44 09 201 35 24 201 26 27 201 17 13	24 31 12 24 26 45 24 22 48 24 18 00 24 13 12				49 49	52.00 53.00 54.00 55.00 56.00	193 18 54 193 14 06 193 08 24 193 00 54 192 54 36	19 26 52 19 22 48 19 18 32 19 13 44 19 09 28
0	3 41 3 41 3 41 3 41	48.00 49.00 50.00	201 08 24 200 59 56 200 49 48 200 44 24 200 36 00	24 08 24 24 03 54 23 59 24 23 54 32 23 51 00				49 50	57.00 58.00 59.00 00.00 01.00	192 50 16 192 44 20 192 39 00 192 32 20 192 27 18	19 01 51 18 58 30 18 55 12
	03 4 03 4 03 4 03 4	8 53.00 8 54.00 8 55.00	200 25 48 200 17 24 200 10 48 200 02 24 199 53 38	23 47 02 23 42 00 23 36 32 23 32 20 23 28 08			03 03 03 03	50 50 50	03.00 04.00 05.00	192 22 15 192 15 36 192 10 37 192 03 54 191 58 12	18 42 36 18 37 44 18 33 18
	03 4		199 45 46 199 36 36 199 29 56 199 20 34 199 12 36	23 19 48 23 15 39 23 11 02			0:	3 50 3 50 3 50	08.00 09.00 10.00	191 51 36 191 46 30 191 42 54 191 38 06 191 30 33	18 21 03 18 18 18 18 13 48
	03 4 03 4	9 02.00 9 03.00 9 04.00 9 05.00 9 06.00		22 56 56 22 52 40 22 49 01			0	3 50 3 50 3 50	13.00 14.00 15.00	191 24 44 191 19 44 191 14 1: 191 09 3: 191 05 1:	18 01 33 17 58 12 6 17 54 00
	03 03	49 07.00 49 08.00 49 09.00 49 10.00 49 11.00	198 17 20 198 09 00 198 03 30	22 35 24 3 22 31 22 6 22 26 24			0	3 5 3 5 3 5 3 5	0 18.00 0 19.00 0 20.00	· 190 47 2	4 17 42 32 7 17 36 43 8 17 33 39

					20 MAT 30				
HR	MIN	SEC	AZ IMU7H	ELEVATION		HR MIN	SEC	AZIMU7H	ELEVATION .
03 03 03 03		22.00 23.00 24.00 25.00 26.00	190 33 00 190 27 36 190 23 24 190 18 00 190 11 06	17 25 44 17 22 37 17 18 00 17 16 12 17 12 00		03 51 03 51 03 51 03 51 03 51	32.00 33.00 34.00 35.00 36.00	185 26 27 185 23 24 185 20 02 185 16 48 185 11 24	13 07 15 13 03 21 13 00 14 12 56 24 12 52 48
03 03 03 03 03	50 50 50 50	27.00 28.00 29.00 30.00 31.00	190 06 36 190 02 24 189 58 04 189 52 40 189 46 48	17 06 00 17 02 20 16 57 21 16 54 32 16 50 20		03 51 03 51 03 51 03 51 03 51		185 06 28 185 03 54 185 00 36 184 57 28 184 53 24	12 49 12 12 47 24 12 43 08 12 39 46 12 37 37
03 03 03 03 03	50 50 50 50	32.00 33.00 34.00 35.00 36.00	189 42 00 189 37 48 189 32 24 189 27 18 189 23 42	16 46 44 16 42 28 16 38 38 16 34 12 16 31 12		03 51 03 51 03 51 03 51 03 51	43.00 44.00 45.00	184 50 42 184 48 36 184 46 08 184 40 12 184 36 00	12 33 36 12 28 19 12 24 54 12 22 12 12 18 00
03 03 03 03 03	50 50 50 50	37.00 38.00 39.00 40.00 41.00	189 17 16 189 13 15 189 09 36 189 05 13 189 02 13	16 27 32 16 23 27 16 19 48 16 14 24 16 11 06		03 51 03 51 03 51 03 51 03 51	48.00 49.00 50.00	184 33 21 184 29 13 184 25 44 184 22 48 184 20 13	12 15 32 12 12 03 12 03 25 12 06 00 12 01 51
03 03 03 03 03	50 50 50 50	42.00 43.00 44.00 45.00 46.00	188 55 12 188 49 08 188 45 18 188 40 44 188 37 30	16 07 48 16 03 00 15 58 15 15 56 16 15 52 12		03 5 03 5 03 5 03 5 03 5	1 53.00 1 54.00 1 55.00	184 15 39 134 11 06 184 09 25 184 05 27 184 02 02	12 00 03 11 56 24 11 52 48 11 49 12 11 45 00
03 03 03 03		48.00 49.00 50.00	188 31 44 188 28 12 188 23 24 188 18 14 188 13 48	15 49 08 15 45 32 15 42 00 15 38 56 15 33 46			1 58.00	183 58 15 183 54 43 183 51 36 183 46 48 183 46 30	11 42 00 11 39 36 11 37 15 11 33 43 11 29 38
03 03 03 03	50 50 50	53.00 54.00 55.00	188 09 03 188 04 30 188 00 36 187 56 24 187 51 36	15 30 36 15 26 38 15 23 24 15 20 24 15 15 36		03 5 03 5	02.00 03.00 02.04.00 02.05.00 02.06.00	183 44 06 183 40 44 183 36 54 183 32 16 183 30 54	11 15 36
03 03 03 03	5 5 6 3 5 6 3 5 1	58.00 59.00 00.00	187 48 00 187 40 19 187 38 55 187 34 46 187 29 06	15 08 27 15 05 02 15 00 36		03 : 03 :	52 07.00 52 08.00 52 09.00 52 10.00 52 11.00	183 29 13 183 23 34 183 19 22 183 17 42 183 11 13	11 04 33 11 02 31 10 59 09
0:	3 5 3 5 3 5 3 5 3 5 3 5 3 5 3 5 3 5 3 5	1 03.00 1 04.00 1 05.00	187 26 20 187 21 00 187 19 15 187 15 36 187 09 14	14 50 20 14 47 24 14 43 48		03 03 03	52 12.00 52 13.00 52 14.00 52 15.00 52 16.00	183 10 12 183 08 24 183 04 26 183 01 33 182 58 12	10 49 51 10 47 56 10 45 00
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0	3 5 3 5 3 5		186 43 30 186 39 00 186 36 00 186 32 33 186 28 40	14 15 00 14 10 48 1 14 06 36		03 03 03		182 38 20 182 36 36 182 33 57 182 31 30 182 27 36	10 16 19 7 10 14 06 10 10 48
0	03 5 03 5 03 5	51 17.00 51 18.00 51 19.00 51 20.00 51 21.00	186 23 2° 186 20 2° 186 17 3 186 12 3 186 08 1	4 12 55 12 8 13 52 08 6 13 48 03		03 03 03	52 27.00 52 28.00 52 29.00 52 30.00 52 31.00	182 25 12 182 22 12 182 19 44 182 18 36 182 17 20	10 02 02 8 10 00 03 6 09 58 08
- 1	03 5 03 5	51 22.00 51 23.00 51 24.00 51 25.00 51 26.00	186 00 3 185 56 5 185 54 0	9 13 38 38 2 13 33 50 0 13 30 18		03 03 03 03	52 34.00		2 09 46 15 2 09 43 08 3 09 39 18
	03 03 03	51 27.00 51 28.00 51 29.00 51 30.00 51 31.00	185 46 1 185 43 0 185 37 0 185 33 3	12 13 23 38 18 13 19 48 11 13 17 16 12 13 13 12		03 03 03 03	52 37.00 52 38.00 52 39.00 52 49.00	181 54 0 181 47 5 181 45 3 181 45 3	0 09 34 48 6 09 33 43 6 09 32 06 6 09 25 12
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н	R I	MIN	SEC	AZIMUTH	ELEVATION		HR MI	N SEC	AZIMUTH	ELEVATION
00000	3 3	52 52	42.60 43.00 44.00 45.00 46.00	181 43 15 181 39 36 181 37 30 181 35 16 181 33 00	09 17 27 09 14 42 09 12 00 09 06 32 09 01 26		03 53 03 53 03 53 03 53 03 53	53.00 54.00 55.00	178 48 36 178 45 03 178 41 38 178 39 36 178 39 18	05 38 27 05 38 24 05 37 40 05 37 12 05 35 24
0	3	52 52 52 52 52 52	47.00 48.00 49.00 50.00 51.00	181 32 24 181 26 56 181 23 16 181 20 49 181 17 42	08 58 12 08 56 56 08 54 36 08 51 50 66 50 24		03 5: 03 5: 03 5 03 5 03 5	3 58.00 3 59.00 4 00.00	178 38 24 178 33 36 178 30 28 178 28 12 178 28 55	05 35 16 05 34 12 05 32 56 05 31 12 05 27 50
000	)3 )3	52 52 52 52 52	52.00 53.00 54.00 55.00 56.00	181 15 36 181 13 19 181 10 48 181 00 32 181 03 00	08 47 24 08 43 48 08 40 30 08 36 50 08 35 49		03 5 03 5 03 5	4 02.00 4 03.00 4 04.00 4 05.00 4 06.00	178 30 25 178 28 12 178 27 10 178 27 00 178 26 24	05 24 00 05 21 00 05 19 48 05 17 20 05 16 51
0	03 03 03 03 03	52 52 52 53 53	57.00 58.00 59.00 00.00 01.00	181 01 12 181 00 36 180 57 36 180 54 50 180 53 13	08 31 19 08 28 48 08 25 08 08 23 20 08 20 45		03 5 03 5	07.00 4 08.00 64 09.00 64 10.00 64 11.00	178 26 24 178 25 15 178 16 15 176 11 38 178 10 08	05 16 04 05 10 48 05 08 20 05 05 27 05 01 19
0	03 03 03 03	53 53 53 53 53	02.00 03.00 04.00 05.00 06.00	180 52 30 180 51 28 180 44 02 180 41 49 180 39 00	08 17 24 08 14 20 08 11 06 08 08 24 08 05 24		03 03 03	54 12.00 54 13.00 54 14.00 54 15.00 54 16.00	178 09 18 178 09 18 178 09 18 178 01 04 178 00 18	04 59 24 04 55 04 04 53 24 04 51 00 04 47 27
1	03 03 03 03 03	53 53 53 53	07.00 08.00 09.00 10.00 11.00	180 36 36 180 34 08 180 31 06 180 29 52 180 27 46	06 01 48 07 59 56 07 58 33 07 55 44 07 53 38		03 03 03	54 17.00 54 18.00 54 19.00 54 20.00 54 21.00	177 59 52 177 59 06 177 57 36 177 54 46 177 55 12	04 44 20 04 41 27 04 40 33 04 39 00 04 36 32
	03 03 03 03	53 53 53 53	12.00 13.00 14.00 15.00 16.00	180 22 40 180 21 54 180 21 03 180 19 55 180 18 03	07 49 12 07 45 32 07 42 00 07 37 48 07 34 15		03 03	54 22.00 54 23.00 54 24.00 54 25.00 54 26.00	177 52 08 177 48 36 177 45 10 177 43 48 177 42 50	04 34 48 04 28 44 04 25 12 04 22 40 04 20 24
	03 03 03 03 03	53 53 53 53		180 17 09 180 16 15 180 15 36 180 15 36 180 03 00	07 31 22 07 28 51 07 26 24 07 22 48 07 22 44		03 03 03 03	54 27.00 54 28.00 54 29.00 54 30.00 54 31.00	177 40 48 177 35 42 177 32 24 177 31 12 177 30 10	04 17 27 04 15 32 04 13 48 04 12 32 04 08 24
	03 03 03 03	53	23.00 24.00 25.00	179 51 00 179 46 19 179 46 04 179 45 50 179 45 36	07 22 44 07 22 44 97 20 20 07 16 55 07 15 00		03 03 03 03	54 32.00 54 33.00 54 34.00 54 35.00 54 36.00	177 29 20 177 28 44 177 28 22 177 26 42 177 24 00	04 06 00 04 04 48 04 00 07 03 55 26 03 51 00
*	03 03 03 03	53 53 53	28.00 29.00 30.00	179 45 18 179 45 36 179 45 32 179 45 36 179 44 24	06 59 24 06 57 18		03 03 03 03	54 37.00 54 38.00 54 39.00 54 40.00 54 41.00	177 23 27 177 23 06 177 20 52 177 19 08 177 19 08	03 45 18 03 44 24 03 43 40
	03 03 03 03	5:	33.00 34.00 35.00	179 44 24 179 44 20 179 44 24 179 44 24 179 30 32	06 43 44 06 39 00 06 36 36	1	03 03 03 03	54 42.00 54 43.00 54 44.00 54 45.00 54 46.00	177 19 08 177 13 51 177 11 20 177 10 55 177 10 33	03 39 28 03 38 16 03 36 36
	03	5 5 5 5	3 38.00 3 39.00 3 40.00	179 24 36 179 23 2 179 22 5 179 22 44 179 21 4	7 06 28 48 1 06 26 06 4 06 24 03		03 03 03 03	54 47.00 54 48.00 54 49.00 54 50.00 54 51.00	177 03 50 177 02 42 176 58 55 176 56 24 176 56 24	03 29 27 03 27 00 03 23 09
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	ΕO	WAROS AFE	3 THEOO. S	FA. 9.	LAT. 34 56 43 N	LONG. 2	242 0	5 14 E	HT 0785 M	
					20 MAY 58					
HR	MIN	sEC	AZIMUTH	ELEVATION		HR P	MIN	SEC	AZIMUTH	ELEVATION
03 03 03	55 55 55	02.00 03.00 04.00 05.00	176 32 24 176 32 31 176 32 27 176 32 24 176 30 36	02 52 12 02 52 08 02 52 08 02 52 08 02 52 08 02 52 08		03	55 1 55 1 55 1		176 13 44 176 13 44 176 16 26 176 23 27 176 25 40	02 28 30 02 25 04 02 21 39 02 19 12 02 15 39
03	55 55 55		176 28 40 176 26 06 176 22 04 176 18 36 176 14 27	02 51 28 02 44 24 02 40 51 02 38 20 02 34 48		03	55 1 55 1		176 27 54 176 46 04 176 18 43 176 41 42	02 15 36 02 15 36 02 15 36 02 15 36
	P	ATRICK AF	FB RADAR S	5TA. XN-2	LAT, 26 36 55 N 20 MAY 58	LONG.	281	39 06 E	HT 0014	м
HR	MIN	sec	AZIMUTH	ELEVATION					AZIMUTH	ELEVATION
14 14 14 14 14	58	30.00 31.00 32.00 33.00 34.00	197 44 24 197 33 00 197 21 36 197 10 12 196 59 24	37 52 48 37 31 48 37 34 12 37 16 48 37 14 24		14 14 14 14	59 59 59 59	22.00 23.00 24.00 25.00 26.00	189 46 48 189 48 00 189 41 24 189 23 24 189 06 00	32 02 24 32 09 36 31 51 00 31 22 48 31 16 12
14 14 14 14 14	58 58 58	36.00 37.00	196 52 12 194 39 00 196 20 24 196 06 36 196 04 48	37 03 36 36 55 12 36 55 12 37 00 03 36 33 36		14 14 14 14 14	59	28.00	188 54 36 188 49 12 188 47 24 188 48 36 138 39 36	31 09 36 31 03 36 31 01 48 30 42 00 30 03 00
14	58 58	41.00	195 52 48 195 46 48 195 30 36 195 26 24 195 16 12	36 34 12 36 27 36 36 12 36 36 22 12 36 16 12		14 14 14 14	59	32.00 33.00 34.00 35.00	188 21 32 188 08 24 188 08 24 188 07 48 188 46 48	29 55 12 30 12 00 30 04 48 29 44 24 29 09 36
14	58 58 58		195 03 00 194 57 00 194 54 00 194 44 24 193 54 36	36 05 24 36 09 36 36 13 12 35 31 48 35 32 24		14 14 14	59 59 59 59	37.00 38.00 39.00 40.00 41.00	188 54 36 197 36 36 187 38 24 187 37 12 187 37 12	28 59 24 29 31 48 29 41 24
	58	51.00 52.00 53.00	194 01 48 194 02 24 193 57 36 193 55 12 193 55 12	33 58 48 34 39 36		14	59 59 59	47.00 43.00 44.00 45.00 46.00	187 36 36 187 33 00 187 03 36 187 01 48 186 39 36	30 01 12 29 22 48 29 04 48
1	4 5	55.00 56.00 57.00 58.00 59.00	193 06 36	34 00 36 34 18 36		14 14 14	59	47.00 48.00 49.00 50.00 51.00		29 08 24 28 58 48 28 47 24
1 1 1 1	4 5 4 5 4 5	9 01.00 9 02.00 9 03.00	192 40 48 192 43 12 192 27 00 192 15 00 192 06 36	34 13 48 34 00 36 34 01 12		14 14 14 14	59 59 59	52.00 53.00 54.00 55.00 56.00	186 17 24 186 11 24 186 06 00 186 03 36 186 01 12	28 40 12 28 31 48 28 09 36
1	4 5 4 5 4 5 4 5	9 06.00 9 07.00 9 08.00	191 55 12 191 49 12 191 40 44 191 38 24 191 34 4	2 33 33 36 8 33 28 12 4 34 00 00		14 14 14 15	59 59 500	00.00	186 00 00 185 58 44 186 00 30 185 59 20 185 59 2	3 27 43 48 6 27 40 12 4 27 27 36
	14 5	9 10.00 9 11.00 9 12.50 9 13.00 9 14.00	191 04 1 190 59 2	2 33 22 12 4 32 54 36 4 55 20 24	3 2 2 3	1: 1: 1: 1: 1:	5 00 5 00 5 00	03.00 04.00 05.00	186 00 3 185 59 2 186 00 3 186 00 3 186 00 0	4 27 10 48 6 27 03 36 6 36 59 24
	14 14 14	59 15.00 59 16.00 59 17.00 59 18.00	190 22 1 190 12 3 190 09 3	2 32 30 00 6 32 20 24 6 32 16 46		1		08.00 09.00 10.00	186 00 3 186 00 3 186 00 3	6 26 01 12 6 25 34 12 6 24 21 36
		59 20.00 59 21.00					5 00	0 12.00		

PATRICK AFB RAGAR STA. XN-2 LAT. 26 35 55 N LONG. 281 39 06 E HT 0014 M

					20 MM1 30				
HR	MIN	SEC	AZIMUTH	ELEVATION	ня	MIN	SEC	AZIMUTH	ELEVATION
15	00	14:00	186 00 00	24 17 24	15	00	38.00	185 08 24	19 31 48
15	00	15.00	186 01 12	24 02 24	15	00	39.00	185 02 24	19 00 00
15			186 00 36	23 42 36	15	00	40.00	185 01 12	18 29 24
15	00	17.00	186 00 36	23 00 00	15	00	41.00	185 00 36	17 54 00
15	00	18.00	186 01 12	23 09 00	15	00	42.00	185 00 36	17 43 12
15	00	19.00	186 01 12	23 12 36	19		43.00	184 49 12	17 17 24
15	00	20.00	186 01 12	23 01 48	1:		44.00	184 26 24	17 C8 24
15	00	21.00	186 00 36	22 58 48	1:			184 28 48	16 44 24
	00	22.00	186 00 36	22	1!			184 28 48	16 32 24
15	00	23.00	185 58 48	22 35 24	1!	5 00	47.00	184 28 48	16 19 48
15	00	24.00	185 56 24	21 45 36	1			184 28 48	16 05 24
15	00	25.00	185 50 24	21 06 00	1			184 28 48	15 55 12
15	00	26+00	185 45 36	20 19 12	1			184 27 36	16 28 12
15	00	27.00	185 43 12	19 41 24	1	5 00		184 22 48	16 48 00
15	00	28.00	185 39 36	19 28 48	1	5 00	52.00	184 18 00	17 49 36
15	00	29.00	185 38 24	18 31 48	1	5 00		183 32 24	17 27 00
15	00	30.00	185 36 36	18 54 36	1	5 00	54.00	183 34 12	15 53 24
15	00	31.00	185 36 00	18 40 12		5 00		183 33 36	15 09 36
15	00	32.00	185 38 24	20 06 00		5 00		183 33 00	14 43 48
15	00	33.00	185 10 48	20 37 12		5 00	57.00	183 24 00	15 03 36
15		24.00	185 15 36	20 51 00		5 00		182 33 36	16 30 00
15		35.00	185 15 00	20 51 36		5 00		182 37 12	17 22 48
15			185 13 48	20 29 24		5 01	00.00	182 35 24	14 50 24
15	00	37.00	185 13 46	20 30 00					